


A ROADMAP FOR PROMOTING WOMEN'S ECONOMIC EMPOWERMENT



ExxonMobil





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RESEARCH COMMISSIONS

This report would not have been possible without the contributions of the research partners and authors of the research commissions, listed below.

ENTREPRENEURSHIP

Improving the Productivity and Earnings of Women-Owned and/or Managed Enterprises in Developing Countries: What Works?

Christopher Woodruff and David McKenzie

Capital, Skills and the Economic Lives of the Poor: Recent Evidence from Field Experiments

Oriana Bandiera, Robin Burgess, Selim Gulesci, Imran Rasul and Munshi Sulaiman

Subsistence, Transformational and Something in Between

Elisa Gamberoni, Rachel Heath and Emily Nix

The Benefits of Women's Business Networks

Vital Voices Global Partnership

Women Who Save: A Comparative Analysis of Ecuador, Ghana and Karnataka, India

Cheryl Doss, Carmen Diana Deere, Abena D. Oduro and Hema Swaminathan

Financial Services for Low-Income Women: Opportunities for Economic Empowerment?

Rekha Mehra, Payal Patel, Adithi Shetty and Anne Golla

Breaking the Metal Ceiling: Female Entrepreneurs Who Succeed in Male-Dominated Sectors in Uganda

Francisco Campos, Markus Goldstein, Laura McGorman, Ana Maria Munoz Boudet and Obert Pimhidzai

FARMING

A Meta-Analysis of Land Rights and Women's Economic Well-Being

Yana Rodgers and Nidhiya Menon

Land Rights and Economic Security for Women in Vietnam

Nidhiya Menon, Yana Rodgers and Alexis Kennedy

Good and Efficient? Women's Voice in Agriculture

Ralitza Dimova and Ira N. Gang

You Can't Eat Cotton: Evidence on Crop Portfolios and Gender from Benin

Markus Goldstein, Karim M'chich, Joao Montalvao, Ana Maria Munoz Boudet, Michael O'Sullivan and Beth Zikronah Rosen

Women's Economic Empowerment in Agriculture: Supporting Women Farmers

Cheryl Doss, Zoe Bockius-Suwyn and Shereen D'Souza

Closing the Gender Asset Gap: Learning from Value Chain Development in Africa and Asia

Agnes R. Quisumbing, Deborah Rubin, Cristina Manfre, Elizabeth Waithanji, Mara van den Bold, Deanna Olney and Ruth Meinzen-Dick

Increasing the Productivity and Earnings of Rural Women: What Works?

James C. Knowles

WAGE EMPLOYMENT

How to Improve Women's Employability and Quality of Work in Developing and Transition Economies

Petra Todd

Case Studies and Best Practice Research on Empowering Women through Clean Cookstoves Projects in Bangladesh

Nepal Chandra Dey

YOUNG WOMEN'S EMPLOYMENT

Identifying Research Gaps and Priorities for Women's Economic Empowerment: Gender and Youth Employment

Elizabeth Katz

SPECIAL COLLABORATION WITH THE UNITED NATIONS

Mapping Demand for Women's Economic Empowerment Projects: A Global Analysis of UN Women's Fund for Gender Equality Proposals

UN Foundation and UN Women Fund for Gender Equality
By UN Foundation Consultants: Anna Wolf, Jade Hawes, Valentina Luketa, and Mar Martinez

ACRONYMS

ADC: Alternative Delivery Channel

BRAC: formerly known as Bangladesh Rural Advancement Committee

CBFW: Cherie Blair Foundation for Women

CCT: Conditional Cash Transfer

EPAG: Economic Empowerment of Adolescent Girls and Young Women

FAO: Food and Agriculture Organization of the United Nations

FGE: UN Women's Fund for Gender Equality

GPFI: Global Partnership for Financial Inclusion

GSMA: Global System for Mobile Communications Association

ICRW: International Center for Research on Women

IFC: International Finance Corporation

ILO: International Labor Organization

IT: Information Technology

NGO: Non-Governmental Organization

RCT: Randomized Control Trial

SEWA: Self-Employed Women's Association

SME: Small and Medium Enterprise

TA: Technical Assistance

USD: United States Dollars (also \$)

VAS: Value Added Services

WDR: World Development Report (published by the World Bank)

FOREWORD



KATHY CALVIN
President and CEO
United Nations Foundation

According to United Nations data, 1.2 billion people live in extreme poverty. The majority of them are women and girls.

Women are not less capable of achieving economic success than men, but they are more likely to encounter circumstances, norms and laws that limit their full economic participation. Women are more likely to

work in unsafe, insecure jobs for low pay and less likely to have access to capital, markets, education, training and the right to own or transfer property. Women disproportionately fulfill family, child and home care responsibilities, and too many women, an estimated 222 million, lack reliable access to family planning services and the health and economic benefits that come with being able to plan one's family.

Economic inequity creates opportunity costs that are substantial and global—because research suggests that when a woman's economic status improves, so does that of her household, her community and, potentially, her country.

Thus, this report was pursued to identify the most promising strategies for maximizing investments in women's economic empowerment. Led by UN Foundation Senior Fellow, Mayra Buvinić, this first-of-its-kind report recommends approaches to help women become economic agents who benefit from capital, markets, information and opportunities on fair and equitable terms.

We are grateful to our partner, the ExxonMobil Foundation, and to all who contributed to this effort. We hope the insights contained here strengthen essential investments in women's economic potential and unleash its documented benefits for all.

Studies show that women's economic empowerment results in greater investments in children's schooling and health, and reduced poverty for all. Yet there has been a crucial knowledge gap regarding the most effective ways to advance women's economic prospects and ensure interventions are appropriately designed for different economic and cultural contexts. That's why two years ago, we approached the

United Nations Foundation about a research program to identify proven, promising and high-potential interventions that increase women's earnings potential in varying contexts. This report is the result of that effort and hopefully will serve as a guidepost for funders, implementing organizations and policy makers interested in supporting women to further economic development.

We are grateful to the experts who contributed to this effort and to internationally recognized gender and social development expert Mayra Buvinić and the United Nations Foundation for leading this groundbreaking initiative.

While this initiative was first prompted by our desire to ensure the programs we support have a lasting impact, we see this as an important resource to the broad development community and hope this Roadmap will spark greater investments in research, as well as ongoing collaboration.



SUZANNE MCCARRON
President
ExxonMobil Foundation



EXECUTIVE SUMMARY

THE RESEARCH QUESTION

Expanding women's economic opportunities benefits both women and society. Documented benefits include greater investments in children, reduced poverty for all and, perhaps most consequentially, enhanced aspirations for the next generation of girls and women. While these many benefits are well understood, much less is known regarding the most effective development interventions to empower them economically. To put it more simply, what works best to increase women's productivity and earnings in developing countries?

AN EVIDENCE-BASED ROADMAP

This research project is a first step in addressing a crucial knowledge gap about which interventions work. It sought to answer this question and produce an evidence-based Roadmap for Action that defines program and policy options that are feasible for different women — for whom— and in different, typical country scenarios that are likely to influence the success of interventions—where. By examining 'for whom' and 'where,' the Roadmap takes into account how economic and social contexts potentially affect the success of interventions.

The Roadmap for Action was crafted primarily to guide actions and investments by the private sector and potential public-private sector partnerships. The Roadmap favors actions that directly and in the short-term seek to empower women economically, and measures empowerment as increases in women's productivity and earnings.

Lessons derived from the project and presented in the Roadmap are grouped into four main categories: Entrepreneurship, Farming, Wage Employment and Young Women's Employment. The first three categories cover main sectors of employment and economic opportunities. Young women's employment is included as a fourth, cross-cutting category because of the unique job challenges confronting young women, especially in poor countries and households.

THE RESEARCH COMMISSIONS

Eighteen research studies were commissioned specifically for this project within a one-year timeframe. Some conducted new data analysis while others reviewed the existing evidence. On the basis of these studies, the project compiled a database of 136 published empirical evaluations of programs and policies. This overview draws on the commissioned studies and the database of empirical evaluations to build the Roadmap for Action and derive lessons learned.

The project and the different commissions searched for credible evidence on the effectiveness of interventions: evidence that was rigorous enough to ensure that the outcome was the result of the intervention and not of factors associated with the intervention, such as characteristics of the women clients or the environment where the intervention took place. Also of interest was the duration of impacts over time, cost-effectiveness, sustainability, and measurement of outcomes.

GUIDEPOSTS AND RATINGS

As main guideposts, the Roadmap uses: (1) different categories of women most likely to be working for pay or seeking work in a particular country scenario (i.e., very poor, poor, non-poor, and young women) and (2) different country scenarios defined by demographic changes and job prospects (i.e., high fertility, agrarian economies; declining fertility, urbanizing economies; declining fertility, formalizing economies; and aging populations, aging societies). The unique job challenges in missing adults-conflict affected economies, and resource rich countries and small island states cut across these four basic scenarios, adding variations to them.

To identify evidence-based actions within these two guideposts, interventions were rated as "proven or being proven," "promising," "high potential," and "unproven" for particular categories of women. Ratings were based on the strength of the empirical evidence and, when the information was available, the cost-effectiveness of interventions.

A ROADMAP FOR ACTION

The Roadmap for Action is presented in the table at the end of this executive summary. For each of the country scenarios, the table includes:

- A summary of the main features and challenges of the particular scenario
- A list of interventions, shaded to indicate their associated ratings, based on the women most likely to be working or seeking work and the types of jobs most likely to be available in the particular country scenario
- Suggested complementary interventions for each scenario

Since the Roadmap for Action is focused on program interventions that deliver results in the short term, it does not include policy and legal reforms (although selected ones are mentioned in the text of the overview), nor does it mention long-term investments in girls' and women's health and education, which are well-known to empower them economically.

The Roadmap identifies nine proven and nine promising interventions to increase women's productivity and earnings in developing countries.

PRIORITY INTERVENTIONS

Many of the proven (or being proven) interventions in the Roadmap are simple and therefore easy to implement, and should benefit large numbers of women. Some can be scaled based on what is already known; others need adaptation to particular environments before scaling up. All are worthy investments.

Proven interventions include designing and marketing appropriate savings vehicles for all women; credit and business management training targeted to women-owned small and medium enterprises (SMEs) (versus subsistence-level enterprises); bundled services, including capital, income generation training and follow-up technical visits, for women-owned micro firms operating at subsistence level; land registration and land titling programs to include women farmers as individual owners or as co-owners with men; quality, accessible and affordable child care for women wage workers; and loans and subsidies to connect poor households, including female-headed households, to electricity grids in rural areas.

Interventions proven to increase young women's economic opportunities are especially attractive, given the large potential benefits for those just entering the labor market. These interventions include demand-driven job services and conditional cash transfers.

PROMISING INTERVENTIONS

The promising interventions listed in the Roadmap must be further tested and refined, but are equally attractive for funders and service providers. They include mobile phones (for financial transactions and market information) for all women; consulting services or customized technical advice for entrepreneurs and microentrepreneurs; and capital in-kind (e.g., inventory) for microentrepreneurs.

Promising interventions for women farmers include information about land rights and farmer associations for all farmers; a suite of services for subsistence farmers; and single services (e.g., modern agricultural inputs and knowledge, and financial services) for smallholder commercial farmers. Promising interventions for young women are livelihood programs and unconditional cash transfers.

A large potential female clientele in developing countries is ready to use and benefit from the services these interventions provide, if they are well-designed and targeted.

HIGH POTENTIAL INTERVENTIONS

The Roadmap does not cover many interventions for which there is no good evaluation data. It overcomes this limitation somewhat by including a rating for some of the more obvious high-potential interventions on conceptual grounds, even if there is little or no empirical evidence to support them.

These interventions include farmer field schools for women; job information for young women; firm certification programs, and non-traditionally female skills training for women wage workers. They also include business associations and networks for entrepreneurs, as well as mentors and role models for young women.

Looking ahead, these high potential interventions merit attention and innovation by both researchers and project implementers.

THE VERY POOR NEED MORE

Very poor women need a more intensive package of services than less poor women to break out of subsistence production—on and off the farm, in agriculture and entrepreneurship—and reap the benefits of higher productivity and earnings for themselves and their families. These interventions are expensive but can be cost-effective, meaning benefits exceed the comparatively high initial investment.

There is no silver bullet to grow the productivity of subsistence farmers and entrepreneurs. This is particularly challenging because the delivery of bundled services is more expensive and requires more implementation capacity, and the very poor often reside in communities with few resources, frail institutions and weak delivery systems.

CLEVER DESIGN ADJUSTMENTS

One common success factor that was identified in the research review was reliance on simple, clever design features that are able to overcome family and social pressures, as well as mobility constraints that impede women from growing their earnings in poorer and/or more socially conservative settings.

Many of these design features give women a measure of autonomy in an otherwise restricted environment where they are not free to make work-related choices or travel alone. Perhaps most notable among them is replacing credit officers and other service providers with the use of mobile phones to access financial services, conduct financial transactions in private, receive reminders to save, and obtain information on prices and jobs in real time without having to travel long distances. There are also other simple design adaptations that are neither expensive nor difficult to implement, such as providing capital in-kind (e.g., inventory) to nudge women to keep the capital in the business rather than divert it to other uses, or modifying the location of programming to accommodate women's mobility constraints in societies that practice female seclusion.

COMPETENT IMPLEMENTATION

Competent project implementation is the linchpin to successful execution of good project design. Competent implementation, an often underrated final element in helping to account for project success, entails understanding the context—the where—and embedding interventions to meet the particular demographic and employment challenges women face in different contexts.

ADDRESSING KNOWLEDGE GAPS

While there is a growing body of rigorous evidence about what works to empower women economically, there is very little evidence on the costs and benefits and even less evidence about the sustainability of interventions. These gaps need addressing.

Other priority knowledge gaps include understanding the trajectories of success among working women. Data on characteristics linked to success could be useful to help identify profiles of women entrepreneurs, farmers or wage workers with firms or farms most primed for growth or most ready to succeed in non-traditional occupations. The ability of programs to recruit and select women and young women most ready to succeed would significantly increase their effectiveness and cost-effectiveness. Data on what works for women farmers is also lacking, and needs to be addressed.

Additional research should focus on women's preferences, the constraints under which they operate, and the opportunities they see ahead. As technological innovations are increasingly accessible to women, big data (the growing availability and use of very large data sets that are continuously generated and digitally captured through mobile phones and the Internet) could potentially provide valuable information to better design and tailor programs in response to women's needs. Big data could also provide valuable information to monitor and assess the impact of programs by tracking women clients' views on and responses to the services provided in real time.

Building the evidence base systematically, so that knowledge gaps are explored sequentially and are guided by program priorities, should advance knowledge meaningfully and efficiently in this field.

LESSONS

The list that follows shows the major lessons learned from the empirical evidence for the four major categories of interventions. These lessons provided the basis for the recommendations made in the Roadmap for Action:



ENTREPRENEURSHIP

- ① Capital alone, as a small loan or a grant, is not enough to grow women-owned subsistence-level firms.
- ② A relatively large capital transfer, if paired with income generation training and follow-up technical visits, can transform occupational choices of very poor women, and can be cost-effective.
- ③ Capital alone can work if it is delivered in-kind (e.g., inventory) to more successful women microentrepreneurs with larger-sized businesses. In-kind capital seems to nudge women to keep the money invested in their businesses.
- ④ Financial services delivered through mobile phones are less costly and may be more effective than other delivery mechanisms in increasing women's business investments.
- ⑤ Business training improves business practices but has few measurable effects on the growth of women-owned subsistence-level firms.
- ⑥ The impact of business training may be improved by increasing the quality and duration of the training, combining training with customized technical visits or expert advice to the firm, and targeting women running larger sized firms.
- ⑦ Savings interventions increase women's business earnings. Women seek savings vehicles, and use personal savings to invest in their businesses.

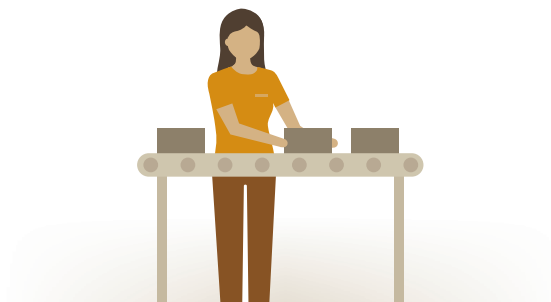


FARMING

- ⑧ Formal ownership and control over farmland improves women's productivity and economic security. But the success of land tenure interventions depends on paying attention to social and local contexts.
- ⑨ Farmer groups and collectives can provide individual women producers with access to markets and help overcome constraints in meeting demands of agricultural supply chains.
- ⑩ An integrated suite of services, which target both production and marketing and address social constraints, is the main feature of agricultural projects that succeed in raising the productivity of small-scale women farmers.
- ⑪ Single agricultural services, rather than a full suite, may be enough to increase productivity of women with larger sized farms, more assets, and more control over those assets.

FARMERS AND RURAL ENTREPRENEURS

- ⑫ Access to electricity increases rural women's productivity and earnings. Access can be increased by providing targeted loans or subsidies for connection costs to existing grids.
- ⑬ Mobile phones help increase earnings of women farmers and rural entrepreneurs by providing access to market information.
- ⑭ Female autonomy is an important determinant of rural women's earnings and influences the success of interventions targeting women farmers and rural entrepreneurs.



WAGE EMPLOYMENT

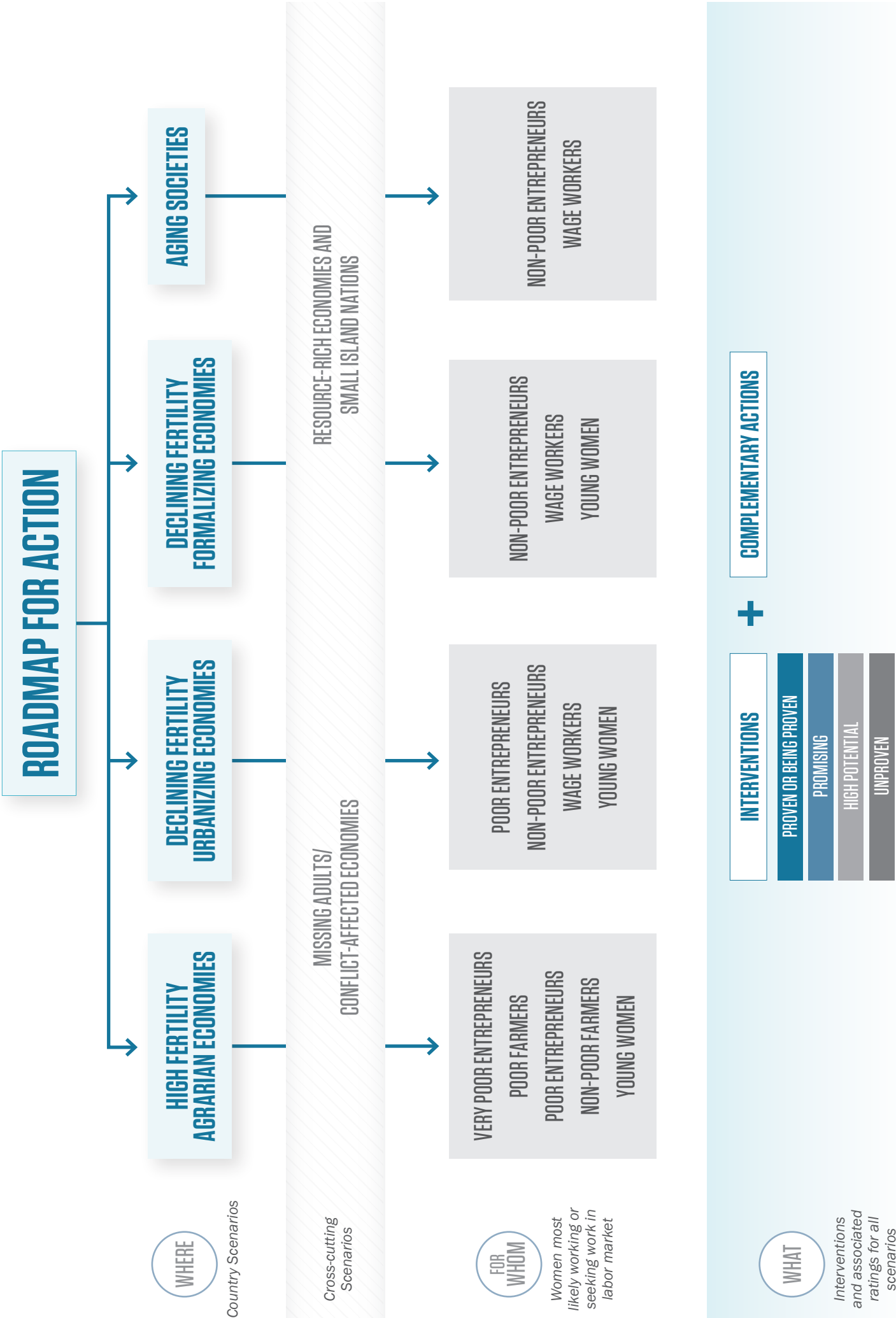
- ⑮ Skills training, job search assistance, internships and wage subsidies introduced to cope with economic shocks increase employment levels of adult women, but do not raise wages.
- ⑯ Access to childcare increases women's wage employment levels and earnings, but design and delivery matter to ensure quality, affordable and cost-effective care.



YOUNG WOMEN'S EMPLOYMENT

- ⑰ Demand-oriented skills training, combined with on-the-job training and wage subsidies, increase young women's employability and earnings, if social restrictions against hiring young women are not binding.
- ⑱ Cash grants to young women, conditional on them attending school, increase their attendance and may improve educational outcomes. Cash grants with no conditions may increase young women's employment and income and have sizeable social benefits.
- ⑲ Livelihood programs that combine reproductive health education with income and asset-building show promising results for young women, especially in low-income, socially conservative settings.

TABLE 2: WHAT WORKS FOR WHOM AND WHERE



ROADMAP FOR ACTION

HIGH FERTILITY AGRARIAN ECONOMIES^{15,16}

Lower per capita resources for investment in human capital and growth¹⁷
High fertility, including among adolescents
Large youth populations with low schooling levels
High maternal mortality rates, particularly among mothers under age 15
Inadequate infrastructure and services for rural majority

Poorer health and lifetime earnings for women and children, greater household vulnerability to poverty linked to agriculture
Women overrepresented in low productivity, subsistence agriculture and subsistence level firms
Women face severe time constraints

COUNTRY
SCENARIO

DECLINING FERTILITY URBANIZING ECONOMIES¹⁹

Potential for rapid economic growth in near future
Early stages of fertility decline and rising share of working-age population
Poor maternal health and high adolescent fertility

Jobs mostly in informal sector
Potential shortage of infrastructure and services, especially for poor
Jobs in light-manufacturing expand in countries integrated into global markets which provide opportunities for women

VERY POOR ENTREPRENEURS	POOR FARMERS	POOR ENTREPRENEURS	NON-POOR FARMERS	YOUNG
Microsavings Bundled services Rural electrification	Microsavings Land rights/land titling Rural electrification	Microsavings Bundled services Rural electrification	Savings Land rights/land titling Credit	Microsavings Rural electrification Demand-driven job services Conditional cash transfers
Mobile phones Suite of services for farming Farmer associations Information on land rights	Mobile phones Suite of services for farming Farmer associations Information on land rights	Mobile phones In-kind capital Consulting	Mobile phones Modern agricultural inputs Farmer associations Information on land rights	Mobile phones Unconditional cash transfers Livelihood programs
Farmer field schools	Farmer field schools	Business networks	Farmer field schools	Mentors, role models
Micro cash loan or grant alone Business training alone		Micro cash loan or grant alone		

INTERVENTIONS

PROVENOR
BEING PROVEN

PROMISING

HIGH POTENTIAL

UNPROVEN

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information and services¹⁸
Investments in schooling that increase education quality for all and reduce gender gaps in school enrollment and completion

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information and services, particularly targeted at youth
Investments in secondary schooling and education quality

¹⁵ Fertility levels to define demographic trends from UN Population Division, 2010; employment structures to define job prospects from World Bank, 2013, Table 3, 352-5.

¹⁷ Based partly on Buvinic et al. (2010), "Investing in Gender Equality: Looking Ahead," p. 275.

¹⁸ Buvinic et al. (2010)

¹⁹ Such as Bangladesh, Pakistan and Vietnam.

¹⁶ Such as Ethiopia, Kenya and Mozambique.

ROADMAP FOR ACTION

DECLINING FERTILITY FORMALIZING ECONOMIES²⁰

Potential for rapid economic growth
Rise in per capita income due to declining fertility and large share of workers in population
Large urban populations
Divide between modern, urban formal sector and prevalence of informal employment
Women overrepresented in informal employment
Increased number of workers motivated to save and invest



AGING SOCIETIES²¹

Strained public and private resources for support
Rapid fertility decline, graying populations and shrinking pool of working-age young adults
Added resource strains, since women live longer and have fewer economic resources
Increasing disability rates of older workers, reducing savings rates and increasing elderly care expenditures
Females more likely to take up demands of caring for elderly, increasing their time constraints

INTERVENTIONS

PROVEN OR BEING PROVEN

PROMISING

HIGH POTENTIAL

UNPROVEN

NON-POOR ENTREPRENEURS	WAGE WORKERS	YOUNG
Savings Credit Business training Child care	Savings Child care	Savings Demand-driven job services
Mobile phones Consulting		Mobile phones Child care
Business networks	Firm certification Non-traditionally female skills training	Mentors, role models Information on jobs
	Job training or wage subsidies for unemployed	

+

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information services, particularly targeted at youth
Investments in secondary and post-secondary schooling and education quality

NON-POOR ENTREPRENEURS	WAGE WORKERS
Savings Credit Business training Child care	Savings Child care
Consulting	
Business networks	Firm certification Non-traditionally female skills training
	Job training or wage subsidies for unemployed

+

COMPLEMENTARY ACTIONS

Safety net and pension options for vulnerable elders, targeted to elderly women

20 Such as Peru, South Africa and Turkey.

22 Such as Chile, the Russian Federation, Uruguay and other industrial countries.

ROADMAP FOR ACTION

CROSS-CUTTING COUNTRY SCENARIOS

MISSING ADULTS/CONFLICT-AFFECTED ECONOMIES²²

Lower potential for economic growth, households more vulnerable to poverty
If men missing (due to war), more vulnerability to poverty for female-headed households; women need to earn money due to high household dependency ratios
Male labor shortages
Limited infrastructure

COUNTRY SCENARIO

RESOURCE-RICH ECONOMIES AND SMALL ISLAND NATIONS²³

Little job creation outside of natural resources sector
Restricted employment opportunities for women and other excluded groups
Limited access to markets

IN ADDITION TO THE LIST OF INTERVENTIONS UNDER THE SPECIFIC COUNTRY SCENARIO, INTERVENTIONS THAT WILL MOST LIKELY WORK IN POST-CONFLICT COUNTRIES INCLUDE THE FOLLOWING:

Value chain projects that connect farmers and entrepreneurs to new or restored markets
Infrastructure projects paired with income-generating opportunities for women
Women's business associations that contribute to rebuilding the private sector
Interventions that take advantage of new economic spaces for women opened by missing men

+

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information and services
Investment in schooling, including accelerated learning programs and targeted programs to improve the school-to-work transition and skill deficits of young women
Interventions to address gender issues in conflict prevention (including gender sensitive Disarmament, Demobilization, and Rehabilitation programs, and programs to address the consequences of and prevent sexual and gender-based violence)

IN RESOURCE-RICH ECONOMIES AND SMALL ISLAND NATIONS, REGARDLESS OF THE SPECIFIC COUNTRY SCENARIO, INTERVENTIONS WILL MOST LIKELY WORK IF THEY DO THE FOLLOWING:

Identify and develop domestic and niche export markets that can be accessible to women producers
Ensure that women-owned small and medium enterprises (SMEs) and commercial farmers have access to productive resources (capital, technologies and land) so they can profitably operate outside the natural resources sector
Strengthen women's autonomy through clever project design

²² Such as Afghanistan, Liberia and South Sudan.

²³ Such as Algeria, Democratic Republic of the Congo, the Caribbean Islands, and Samoa.



OVERVIEW

SETTING THE STAGE

Runa, a woman in her mid-thirties, was a client of a microfinance program in a rural village in Chittagong, Bangladesh. She was in purdah with a young daughter by her side when we interviewed her outside her modest home. Runa had used the credit from the microfinance program to set up a profitable handicrafts business in her home. She had done well and used part of her earnings to buy a rickshaw for her unemployed husband, who was now earning a living as a rickshaw taxi driver. He had also stopped beating her, Runa volunteered matter-of-factly.⁵

From Runa's standpoint, the microfinance program had been a success. The microloan had truly empowered her. Benefits "spilled over" to her husband, and the household's higher income likely made her daughter better off as well.

Of the more than three billion workers worldwide, about half (1.5 billion) work outside the formal labor market. Most of these workers are in developing countries, working in very small firms with few or no paid employees, in single-person operations like Runa's, or on very small farms. Women are over-represented among microentrepreneurs and smallholder farmers, doing low-productivity, low-paid or unpaid work in firms and on farms (WDR, 2013; FAO, 2011).

Among the other 1.6 billion workers who receive regular wages in the labor market, women workers, on average, are paid significantly less than men (WDR, 2012). Women are also the majority of the two billion or so working-age adults who are neither working in jobs nor looking for paid work (WDR, 2013). The majority of these women do unpaid domestic work—taking care of families, children and the elderly and contributing to society through what has been labeled the "care economy" (Folbre, 2001).

BENEFITS OF EQUALITY

Efforts to improve productivity and earnings and increase the numbers of women in the workforce are important for women and the economy. Jobs empower women and have significant benefits (or "positive spill-overs") for society. In addition, increases in employment and earnings benefit individual women by boosting their self-esteem and bargaining power at home, reducing domestic mistreatment and violence, and delaying early marriage and pregnancy. Documented benefits for society as a whole include greater investment in children's schooling and health, and reduced poverty for all (WDR, 2012; WDR, 2013).

It has been estimated that raising female employment levels to those of males could increase gross domestic product by five percent in the United States, nine per-

cent in Japan, 12 percent in the United Arab Emirates and 34 percent in Egypt, simply through the infusion of additional earners in the economy (Booz and Co., 2012).

In addition to gains for individual women and the economy, income-enhancing interventions for women can help to change traditional gender norms that influence family spending on female children. Rising aspirations for girls, along with increased family spending on them, may be among the most consequential benefits of jobs for women. These benefits provide a convincing argument for investing in expanding economic opportunities for women in developing countries (Box 1).

ORIGINS OF INEQUALITY

Recent research efforts, most notably by the Food and Agriculture Organization of the United Nations (FAO) (2011) and the World Bank (2012 and 2013), have improved our understanding of the factors that constrain women's economic participation as compared to men's. The disparity between the genders in productivity and earnings is persistent and pervasive: the value added per worker is between six percent and 35 percent lower in female-owned firms rather than in male-owned ones; female-managed farms are 20 percent to 30 percent less productive than male-managed farms; and in the workplace women earn as little as 20 percent but never higher than 80 percent of what men earn on average, depending on the country (World Bank, 2012).

But this disparity is not because women are worse entrepreneurs, farmers or wage workers. It is primarily the result of differences in the size of businesses and farms, in the sectors where they operate, and in both educational levels and returns on this education. Women are more likely than men to work in sectors, industries and occupations with lower average labor productivity, such as in low-technology services or in low-mechanized farming. Women's limited access to productive resources and inputs stems from market and institutional failures, such as having less access to up-to-date information about markets and prices than men because of time or social constraints.

⁵ This story and others that introduce sections throughout the report are based on interviews conducted by Mayra Buvinić during the past two decades (c. 1990 – c. 2010).

These productivity and earnings differences are transmitted across generations, creating a productivity trap. For example, poor families in rural villages in India or Bangladesh invest less in girls' schooling and nutrition compared to their investment in boys' schooling

because adult women receive meager or no earnings (Box 1). Women's economic disadvantage today is perpetuated in the form of lower investments in the girls and women of tomorrow.

BOX 1: HOW JOBS FOR WOMEN CAN CHANGE NORMS

The call center industry in India, a significant source of employment for young women, has exemplified how efforts to expand economic opportunity for women can change social norms. In an experiment that increased recruitment of young women to work in call centers, three years of recruitment services in randomly chosen villages led to significant gains in schooling and nutritional levels of girls ages five to 15. The effects were found both in homes where women worked for pay and in homes where no woman worked for pay. Young women's call center employment raised the value of girls in these villages, changing traditional gender norms and reshaping family spending on both female and male children (Jensen, 2010).

The creation and expansion of factory jobs for women in the garment sector in Bangladesh provide another illustration of how the employment of women can have impacts that go beyond the women themselves, affecting future generations of female children. Girls' school enrollment rose faster in Bangladeshi villages that were within commuting distance of garment factories, where the majority of workers are female. No such effect was observed among boys (Heath and Mobarak, 2011).

RESEARCH FRAMEWORK

On the outskirts of the city of Ibadan, Nigeria, Ade cultivated a small, sparsely planted plot with a baby on her back and three other visibly undernourished older children standing nearby. Her efforts to grow an improved soybean variety, which could have improved her children's diet, had failed because she lacked the time to tend to the new crop and could not afford to hire agricultural labor. High fertility and poverty conspired and left Ade with no slack time to invest in growing a potentially high-value crop, even when she had received free seeds and farming advice from the local agricultural research agency.

Whether an intervention works depends on the situation of the woman receiving it, and the context in which she lives. It is hard to visualize how farmers like Ade will ever benefit from interventions seeking to increase their productivity in farming if their work and time burdens are not reduced by complementary programs, including access to quality family planning and reproductive health services.

In contrast with Ade's situation, Runa's microfinance success story in Bangladesh conveys the power of small changes (e.g., a micro loan) having multiple benefits, or what Banerjee and Duflo (2011) refer to as the "quiet revolution" of small policy changes. But we cannot assume that other female microfinance clients will necessarily follow her success. Runa may have had a unique entrepreneurial spirit that played a large part in her knowing how to use the credit to grow a profitable business. It may also be that at another time or in another place, Runa would not have been able to replicate her own success. The timing of getting the loan

may have coincided with a growth spurt in the village economy or other local investments that provided the inputs and markets for Runa to run a profitable business.

The Roadmap project and authors of its commissioned studies searched for credible evidence on the effectiveness of interventions: evidence that was rigorous enough to ensure that the outcome was the result of the intervention, rather than of selection effects (e.g., Runa's exceptional abilities) or placement biases (e.g., the village having favorable conditions). In addition to the effectiveness of the intervention, cost-effectiveness, sustainability, measurement of outcomes and the duration of impacts over time were also considered in ranking interventions.

Data about cost effectiveness (or benefit-cost) is included where available. In the absence of data we prefer simple interventions over complex ones and interventions reaching large numbers of women over "boutique" programs reaching few women. Simple in-

terventions are also preferred because they are more easily implemented, taken to scale and sustained after a funder or implementer has left. Measuring productivity and earnings is not always straightforward, especially for farmers and self-employed women with highly variable earnings, so we took this into account as well. Finally, lasting impacts are obviously more desirable than gains that may be short-lived. For more detail about how each of these issues was assessed, see Box 2 at the end of this section.

The Roadmap for Action was crafted primarily to guide actions and investments from the private sector and potential public-private sector partnerships. Other audiences for this report include other funders and implementers of women's economic empowerment programs.

GUIDING QUESTIONS

Three main questions guided this research:

What works: Which economic empowerment interventions are proven, promising or high-potential, based on the evidence from rigorous policy and program evaluations?

For whom: For specific categories of women likely to be working for pay or seeking work, which interventions were most effective?

Where: How do typical country scenarios influence the success of interventions?

TYPES OF WOMEN

Given the available information, women were categorized into four groups: very poor, poor, non-poor, and young. Below, typical characteristics of each group derived from studies that included this information are described.

VERY POOR:

- Self-employed women, home-based or street vendors with no set stall or shop, with no paid employees and average monthly revenues of \$80 to \$100 at market exchange rates, and profits of approximately \$1 per day.⁶
- Subsistence-level unskilled laborers, often with irregular, seasonal income.
- Women vulnerable to food insecurity and undernourishment, often illiterate, and lacking household productive assets.

- Women who may be the primary household income-earner.

POOR:

- Microentrepreneurs who may be home-based or rent a market stall or shop, with revenues greater than \$100 per month and potentially one or two employees.⁷
- Subsistence farmers growing food primarily for family consumption in a family plot, female-owned plot or household garden. Female farmers generally do not own plots unless they are heads of a farm household. These women may sell some surplus to local markets, and may or may not control proceeds from farming.

NON-POOR:

- Small and medium enterprise (SME) owners with between five and up to 50 employees and monthly revenues of \$5,000 or more, and more than \$100,000 in some cases.
- Smallholder farmers growing food crops and/or cash crops for sale in regional, national or cross-border markets. These women own or manage the farm and control its proceeds.

YOUNG WOMEN:

- Generally women between the ages of 15 and 24 (or older in post-conflict settings, to include older young women who have missed years of schooling during war) who are typically poor or very poor.

COUNTRY SCENARIOS

Interventions that seek to empower women economically do not take place in a vacuum. Their effective implementation depends on the country's context. Demographic changes and job prospects are particularly relevant in framing the context that surrounds and shapes women's economic participation.

Demographic changes and job prospects can work in tandem to create four basic country scenarios with potentially different economic options for women: (1) high fertility, agrarian economies (such as the local economy around Ibadan, Nigeria where Ade, the farmer mentioned in the introduction to this section, lives); (2) declining fertility, urbanizing economies (such as Bangladesh, where Runa runs her business); (3) declining fertility, formalizing economies (including Peru,

6 All monetary amounts in this document are in U.S. dollars, unless otherwise noted.

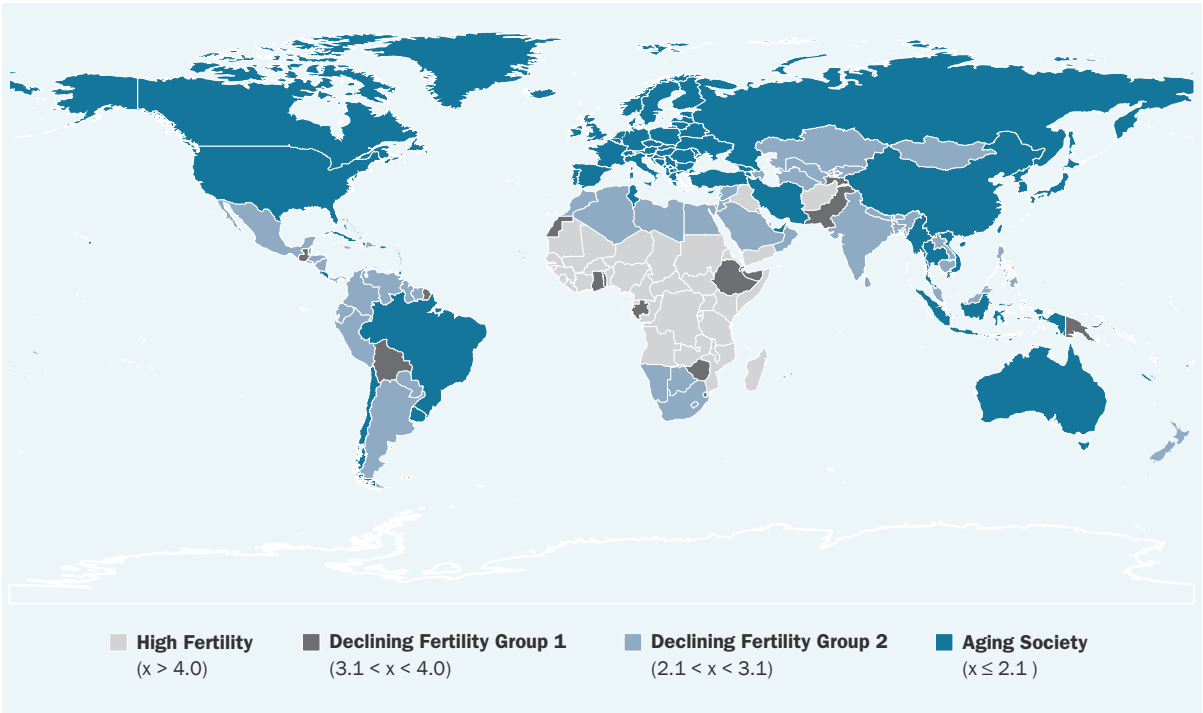
7 Woodruff and McKenzie in this report, based on average revenues in studies reviewed. The upper limit on revenues for microenterprises is less than \$5,000 monthly, the lower cutoff for a small enterprise.

8 These country scenarios describe typical country situations. Individual countries or regions within countries may deviate significantly from the typical country scenario presented here.

where Juana, mentioned in the entrepreneurship section in this overview, resides); and (4) aging populations, aging societies (including countries in Eastern Europe and in the Southern Cone of South America).⁸ The unique job challenges in missing adults/conflict-affected economies, and resource-rich countries

and small island states cut across these basic scenarios, adding variations and challenges to them. (Figure 1 maps countries according to different stages of fertility transition. Annex A provides detailed descriptions of each scenario. Annex B lists countries by fertility stage.)

FIGURE 1: WORLD FERTILITY MAP



A FOCUS ON PROGRAMS

A wide range of policies and programs—from strengthening economic rights for women under the law to providing women with greater access to quality child care and financial literacy—can potentially spur women’s economic advancement.

This research narrows the range of options and *favors actions that have direct, short-term impacts on women economically*, while recognizing the importance of complementary investments in women’s human capital (their health and education) and inclusive policies and legal frameworks over the long term.

The reasons for this emphasis are twofold. First, short-term actions fall more easily within the purview of the private sector, which is the main engine of job creation globally, and a key audience for the results of this work.⁹ Second, short-term interventions that succeed in increasing women’s earnings can have a transformative value for society, as noted in the introduction.

CHARACTERISTICS OF INCLUDED STUDIES

This overview draws on the commissioned studies and the database of 136 empirical evaluations (colated from the commissioned studies) spanning entrepreneurship, farming, wage employment and young women’s employment. Gaps in the available evidence regarding an intervention’s impact on farming were partially filled by mapping current good practice in agriculture through 34 case studies of agricultural projects and four case studies evaluating the impact of value chain interventions in agriculture. Three commissioned studies explored the characteristics linked with successful women farmers and entrepreneurs. The commissioned studies also include an analysis of women’s saving patterns, an exploration of female business networks, exploratory work on the role of saleswomen in the clean cookstoves supply chain, and an analysis of in-country demand for economic empowerment interventions for women.¹⁰

The database with the 136 evaluations and their main features is summarized in a table on the Roadmap project’s website. The database includes only studies

with rigorous designs (with natural or statistical controls) and where females were all or a portion of the study sample. Studies that did not include females in the sample are not included.

Nearly half of the evaluations (55 studies) are for entrepreneurship, which lends itself more easily to experimental designs. Forty-two studies evaluate farming (land tenure interventions), and 24 studies evaluate wage employment. Young women are part of 27 studies across all three categories. Most evaluations on entrepreneurship are randomized control trials (RCTs) with rigorous designs but small samples and, therefore, a limited ability to detect small treatment effects in the population. Evaluations of land tenure interventions have large samples and rarely have randomized controls, but often construct them using statistical methods. Wage employment interventions have perhaps the strongest evaluations, with large sample sizes and good statistical controls.^[1]

The distribution of types of interventions across regions reflects the predominance of different employment sources for women in those regions. For example, Asia, Sub-Saharan Africa and Latin America are well-represented in entrepreneurship evaluations (33, 14, and 12 studies, respectively), while East Africa dominates evaluations of farming (13 studies). Evaluations of wage employment take place mostly in Latin America (15 studies), with 11 evaluations in Eastern Europe making up most the rest.

There are very few evaluations of interventions in the Caribbean countries, Middle East and North Africa, and no evaluations in the island nations of the South Pacific. While the database covers 47 countries, some countries are research favorites (India, Kenya, Uganda, Philippines), indicating the tendency for research to build on past research for both practical and knowledge-building reasons. Though the coverage and quality of the evidence for women’s economic empowerment interventions have significantly improved in recent years, nevertheless, the gaps both in the regional coverage of different interventions and in coverage across regions are notable.

9 The private sector is the source of close to 90 percent of jobs globally (WDR, 2013).

10 As described earlier, summaries of these papers are found under the Summaries of Commissioned Studies section of this report.

[1] Not surprisingly, many of these evaluations are of large-scale government programs in middle-income countries with greater in-country research and monitoring and evaluation capacity.

BOX 2: RESEARCH FRAMEWORK

EFFECTIVENESS

Experimental evidence from randomized control trials (RCTs) and naturally occurring experiments is increasingly available and yields rigorous evidence of cause-effect relationships. RCTs overcome the possibility that unobserved factors in the selection of participants (i.e., selection bias) or associated with the intervention (i.e., placement bias), rather than the intervention itself influence or explain the outcome. RCTs, however, are best-suited to measure the effects of direct, on-the-ground assistance to targeted individuals rather than legal or policy changes that reach entire populations. Non-experimental evaluations, including quasi-experimental designs that often occur when policies are rolled out sequentially to large populations (such as the case of legal reform that may trigger multiple changes and affect whole populations) in such a way that they approximate an RCT, are included in this research when they use econometric and other statistical techniques.

TRANSIENT OR LASTING IMPACTS

The question of how lasting the effects are of having access to credit or other income-enhancing interventions often remain unanswered because most evaluations measure results at one point and do not track impacts over time. In addition, project impacts are not all necessarily linear or monotonic, and some interventions with lasting impacts may be slow in demonstrating effects. These are usually complex interventions with delayed outcomes that are difficult to measure, such as changes in the initial resistance men may have to interventions that change gender norms (Woolcock, 2009). We note in the report when there is evidence on lasting impacts. Unfortunately, this information is rare and there is no information about interventions that may have delayed effects.

COST EFFECTIVENESS

Cost-effectiveness analysis is used to compare alternative interventions with the same outcome (e.g., female labor productivity or earnings). Benefit-cost analysis is the more appropriate tool to compare interventions with different outcomes, as long as a monetary value can be assigned to the outcomes. As Knowles details in his study commissioned for this report, this is a field where the availability of data to make these cost calculations is rare. In the absence of these cost estimates, we have prioritized: (a) simple, minimalist interventions over complex ones, all else being equal, for their comparative lower costs and ease of implementation and scaling-up; and (b) interventions that reach large numbers of women over “boutique” programs that reach few women, for the economies of scale that can be exploited.

SUSTAINABILITY

In the case of interventions targeting women, financial (government’s fiscal capacity to scale up after a donor has left) and institutional (implementation capacity after a donor has left) challenges are well known and are one more reason to prefer simple interventions over complex ones for their ease of implementation and scale-up. The weak capacity of institutions is both related to a lack of readily available information on what works in different settings, and to cultural factors that may underplay the importance of empowering women economically. Two recurring concerns with on-the-ground economic empowerment interventions are questions of low uptake (women’s low demand for or participation in the service being provided) and very few successful examples of scaling-up of the pilot or experimental intervention.

MEASURABLE OUTCOMES

Measuring changes in the productivity and earnings of individual women is straightforward conceptually, but much less so practically, especially for women in low-income settings who farm or are self-employed and have highly variable earnings (Rosenzweig, 2012; WDR, 2013). The studies reported here rely on a variety of intermediate outcomes and measures of productivity and earnings for women in self-employment and farming. It is considerably easier to measure changes in productivity and earnings for women working for wages or salaries in the formal labor market. Wages are more easily calculated in urban areas in middle-income countries with increased capacity to record and track labor market statistics by sex.

A ROADMAP FOR ACTION

To build the Roadmap for Action, we examined interventions grouped into four main job categories: entrepreneurship, farming, wage employment and young women's employment. The first three categories cover the main sectors of employment and economic opportunity for women and men. Young women's employment is included as a fourth, cross-cutting category because of the unique job challenges confronting young women, especially in poor countries and households.

The Roadmap for Action is organized by the following: (1) the different categories or types of women (e.g., poor or very poor) most likely to form the majority of women working for pay or seeking work in a particular country scenario, and (2) different country scenarios defined by demographic changes and job prospects. To identify smart evidence-based actions or investments within these guideposts, we used the empirical evidence to rate interventions as "proven or being proven," "promising," "high potential," and "unproven" for particular types of women.

This Roadmap aims to identify the key interventions that can contribute to an increase in women's productivity and earnings, as proxies for economic empowerment.¹¹ Additional measurable outcomes include: growth in women's physical and financial assets, improvements in the stability of women's earnings, increases in women's leisure time, improvements in the work environment and changes in women's attitudes toward work, among others.

RATINGS

An intervention is rated as proven or being proven when the empirical evidence is robust and shows that the intervention is effective and cost-effective or, in the absence of cost-effectiveness data, is simple and replicable. The qualifier "being proven" was added to include a gray area for the many interventions for which the weight of the available evidence is more than promising but not yet fully proven. An intervention is ranked as promising when the evidence is positive but just emerging (one credible study or its equivalent),¹² and not yet convincing in terms of its breadth. High-potential interventions are largely untested but promising conceptually.

Unproven interventions have not been shown to increase productivity or earnings for particular categories of women in particular settings. However, "unproven" does not mean that these interventions would not work for women in different settings or other situations, or do not have other types of benefits for women. The main assessment criteria for this project were gains

in women's productivity and earnings instead of, for example, gains in information, knowledge or business practices.

The evidence supporting these ratings is presented in the Analysis and Lessons Learned narrative that follows this section.

The Roadmap is largely restricted to interventions that have been implemented and evaluated. The category of "high potential" considers some innovations that have yet to be tested, but surely not all that are possible. Further, the absence of ineffective interventions in the Roadmap is partly because evaluations that do not yield significant findings are largely not publishable, contributing to a bias in the published evidence.

A TWO-STEP ROADMAP FOR ACTION

The schematic Roadmap for Action is presented in two steps below. First, the list of interventions and their associated ratings is presented, describing for whom they work (Table 1). Next, interventions are listed for different types of women most likely working or seeking work in countries facing different demographic and job scenarios, illustrating what works for whom and where (Table 2). Specific circumstances that facilitate the successful implementation of each intervention or class of interventions are listed in Annex C, Features of an Enabling Environment.

The interventions listed are primarily for consideration by the private sector and public-private partnerships. Governments have additional policy tools they can effectively put in place for the same purpose, and some of these tools are mentioned in the text of this overview.

The Roadmap is based on and restricted by the available empirical evidence, and is focused on interventions that deliver results in the short-term. Long-term investments in girls' and women's health and education, which are well-known to economically empower them, are not included in this report.

Table 1 outlines the intervention rankings and the types of women for whom the intervention is likely to work.

11 Even though rising productivity and earnings cannot be equated with economic empowerment, they provide more objective, measurable indicators than other, more subjective elements of this empowerment.

12 Compilation of best practices in agriculture was treated as the equivalent of one credible study for the purpose of this report.

TABLE 1: INTERVENTIONS—WHAT WORKS FOR WHOM

PROVEN OR BEING PROVEN	FOR
Evidence for effectiveness or cost-effectiveness is robust or, in the absence of cost-effective data, simple and replicable in different settings, or weight of evidence is more than promising	
Savings	All
Credit	Non-poor
Business management training	Non-poor
Bundled services: In-kind capital (large) + asset-specific training & TA ¹³	Very poor and poor
Land rights/land titling	All
Child care for wage workers	All
Rural electrification	Poor and very poor
Demand-driven job services: skills training, internships, vouchers, and/or subsidies	Young women
Conditional cash transfers	Young women
PROMISING	FOR
Credible evidence is positive, but not yet convincing in terms of breadth	
Mobile phones (for financial transactions and market information)	All
Consulting (TA) services for entrepreneurs	Poor and non-poor
In-kind capital tailored for women microentrepreneurs	Poor
Information on land rights	All
Farmer associations and networks	All
Suite of integrated services for farming ¹⁴	Poor
Modern agricultural inputs (e.g., improved seeds, fertilizer, irrigation)	Non-poor
Livelihood programs (reproductive health + asset building + safe spaces)	Young women
Unconditional cash transfers	Young women
HIGH POTENTIAL	FOR
Intervention has been largely untested but promising on conceptual grounds	
Farmer field schools	All
Information on jobs (through mobile phones)	Young women
Firm certification	All
Non-traditionally female job skills training for wage workers	All
Business associations and networks	All
Mentors and role models	Young women
UNPROVEN	FOR
Intervention has not been effective for the particular category of women in the specific settings where it has been evaluated	
Business management training alone	Very poor
Micro cash loan or grant alone	Very poor, poor
Skills, on-the-job training and/or wage subsidies for the unemployed	Poor

¹³ Technical assistance (TA)

¹⁴ These include farmer groups, financial services, agricultural technologies, extension and training.

Table 2 provides more granular details by combining the information presented in Table 1 (*what works for whom*) with various country scenarios (the *where*). For each of the four basic country scenarios (high fertility, agrarian economies; declining fertility, urbanizing economies; declining fertility, formalizing economies; and aging populations, aging societies), Table 2 includes a summary of the main features and challenges of the particular scenario as well as a list of proven and

promising interventions, shaded to indicate their associated ratings, for the types of women most likely to be working or seeking work (very poor, poor, non-poor or young women) and the types of jobs most likely to be available for them in the particular country scenario (entrepreneurship, farming, wage employment). Suggested complementary actions are also listed for each scenario, including for the two cross-cutting scenarios.

TABLE 2: WHAT WORKS FOR WHOM AND WHERE (FOLLOWING PAGES)

SCENARIO 1: HIGH FERTILITY, AGRARIAN ECONOMIES

SCENARIO 2: DECLINING FERTILITY, URBANIZING ECONOMIES

SCENARIO 3: DECLINING FERTILITY, FORMALIZING ECONOMIES

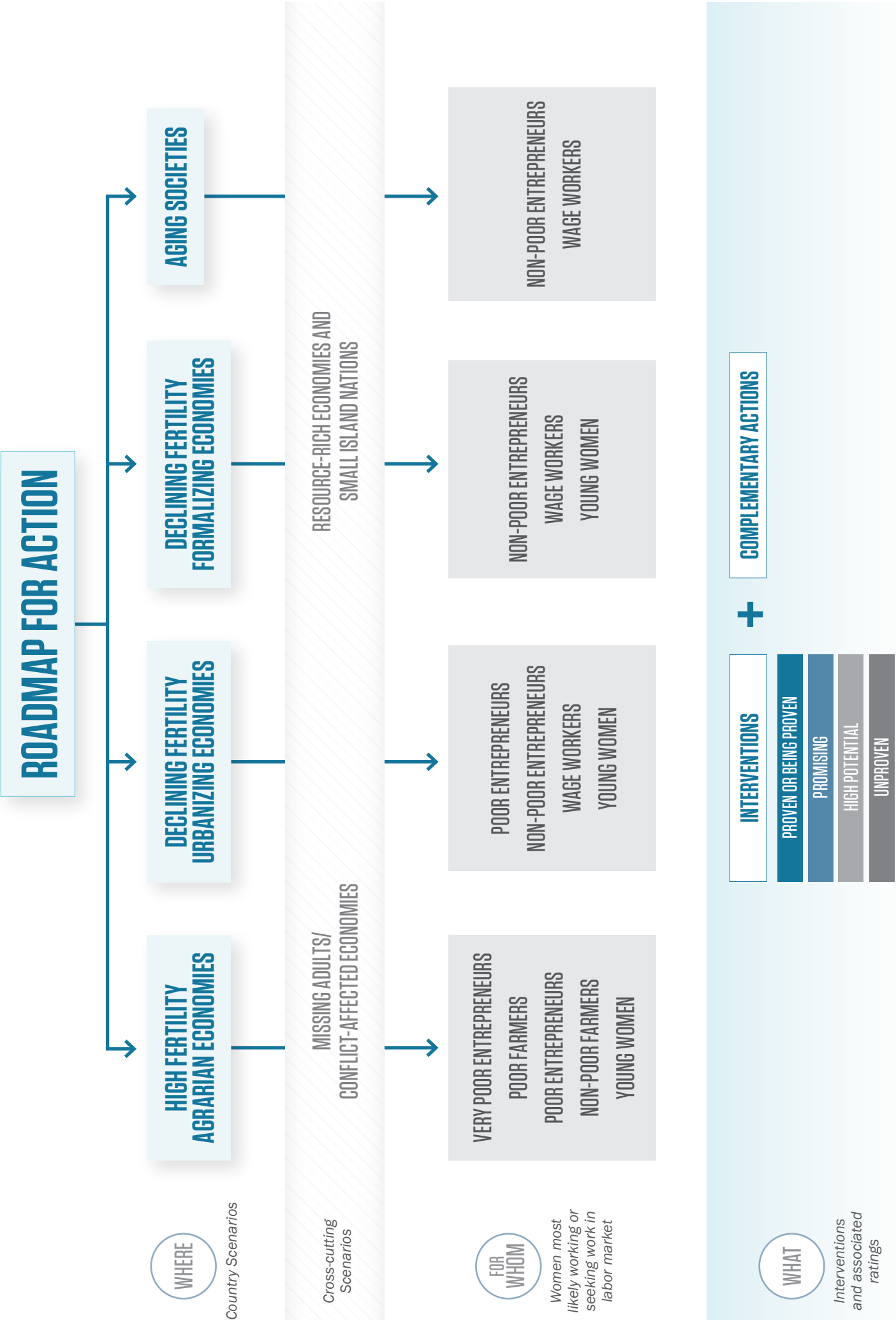
SCENARIO 4: AGING SOCIETIES

CROSS-CUTTING COUNTRY SCENARIOS:

MISSING ADULTS/CONFLICT-AFFECTED ECONOMIES

RESOURCE-RICH ECONOMIES AND SMALL ISLAND NATIONS

TABLE 2: WHAT WORKS FOR WHOM AND WHERE



ROADMAP FOR ACTION

HIGH FERTILITY AGRARIAN ECONOMIES^{15,16}

Lower per capita resources for investment in human capital and growth¹⁷
High fertility, including among adolescents
Large youth populations with low schooling levels
High maternal mortality rates, particularly among mothers under age 15
Inadequate infrastructure and services for rural majority

Poorer health and lifetime earnings for women and children, greater household vulnerability to poverty linked to agriculture
Women overrepresented in low productivity, subsistence agriculture and subsistence level firms
Women face severe time constraints

COUNTRY
SCENARIO

DECLINING FERTILITY URBANIZING ECONOMIES¹⁹

Potential for rapid economic growth in near future
Early stages of fertility decline and rising share of working-age population
Poor maternal health and high adolescent fertility

Jobs mostly in informal sector
Potential shortage of infrastructure and services, especially for poor
Jobs in light-manufacturing expand in countries integrated into global markets which provide opportunities for women

VERY POOR ENTREPRENEURS	POOR FARMERS	POOR ENTREPRENEURS	NON-POOR FARMERS	YOUNG
Microsavings Bundled services Rural electrification	Microsavings Land rights/land titling Rural electrification	Microsavings Bundled services Rural electrification	Savings Land rights/land titling Credit	Microsavings Rural electrification Demand-driven job services Conditional cash transfers
Mobile phones Suite of services for farming Farmer associations Information on land rights	Mobile phones Suite of services for farming Farmer associations Information on land rights	Mobile phones In-kind capital Consulting	Mobile phones Modern agricultural inputs Farmer associations Information on land rights	Mobile phones Unconditional cash transfers Livelihood programs
Farmer field schools	Farmer field schools	Business networks	Farmer field schools	Mentors, role models
Micro cash loan or grant alone Business training alone		Micro cash loan or grant alone		

INTERVENTIONS

PROVENOR
BEING PROVEN

PROMISING

HIGH POTENTIAL

UNPROVEN

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information and services¹⁸
Investments in schooling that increase education quality for all and reduce gender gaps in school enrollment and completion

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information and services, particularly targeted at youth
Investments in secondary schooling and education quality

¹⁵ Fertility levels to define demographic trends from UN Population Division, 2010; employment structures to define job prospects from World Bank, 2013, Table 3, 352-5.

¹⁷ Based partly on Buvinic et al. (2010), "Investing in Gender Equality: Looking Ahead," p. 275.

¹⁸ Buvinic et al. (2010)

¹⁹ Such as Bangladesh, Pakistan and Vietnam.

¹⁶ Such as Ethiopia, Kenya and Mozambique.

ROADMAP FOR ACTION

DECLINING FERTILITY FORMALIZING ECONOMIES²⁰

Potential for rapid economic growth
Rise in per capita income due to declining fertility and large share of workers in population
Large urban populations
Divide between modern, urban formal sector and prevalence of informal employment
Women overrepresented in informal employment
Increased number of workers motivated to save and invest



AGING SOCIETIES²¹

Strained public and private resources for support
Rapid fertility decline, graying populations, and shrinking pool of working-age young adults
Added resource strains since women live longer and have fewer economic resources
Increasing disability rates of older workers, reducing savings rates and increasing elderly care expenditures
Females more likely to take up demands of caring for elderly, increasing their time constraints

INTERVENTIONS

PROVEN OR BEING PROVEN

PROMISING

HIGH POTENTIAL

UNPROVEN

NON-POOR ENTREPRENEURS	WAGE WORKERS	YOUNG
Savings Credit Business training Child care	Savings Child care	Savings Demand-driven job services
Mobile phones Consulting		Mobile phones Child care
Business networks	Firm certification Non-traditionally female skills training	Mentors, role models Information on jobs
	Job training or wage subsidies for unemployed	

+

COMPLEMENTARY ACTIONS

Family planning and basic reproductive health information services, particularly targeted at youth

Investments in secondary and post-secondary schooling and education quality

NON-POOR ENTREPRENEURS	WAGE WORKERS
Savings Credit Business training Child care	Savings Child care
Consulting	
Business networks	Firm certification Non-traditionally female skills training
	Job training or wage subsidies for unemployed

+

COMPLEMENTARY ACTIONS

Safety net and pension options for vulnerable elders, targeted to elderly women

20 Such as Peru, South Africa and Turkey.

21 Such as Chile, the Russian Federation, Uruguay and other industrial countries.

ROADMAP FOR ACTION

CROSS-CUTTING COUNTRY SCENARIOS

MISSING ADULTS/CONFLICT-AFFECTED ECONOMIES²²

Lower potential for economic growth, households more vulnerable to poverty
If men missing (due to war), more vulnerability to poverty for female-headed households; women need to earn money due to high household dependency ratios
Male labor shortages
Limited infrastructure

COUNTRY SCENARIO

RESOURCE-RICH ECONOMIES AND SMALL ISLAND NATIONS²³

Little job creation outside of natural resources sector
Restricted employment opportunities for women and other excluded groups
Limited access to markets

IN ADDITION TO THE LIST OF INTERVENTIONS UNDER THE SPECIFIC COUNTRY SCENARIO, INTERVENTIONS THAT WILL MOST LIKELY WORK IN POST-CONFLICT COUNTRIES INCLUDE THE FOLLOWING:

Value chain projects that connect farmers and entrepreneurs to new or restored markets
Infrastructure projects paired with income-generating opportunities for women
Women's business associations that contribute to rebuilding the private sector
Interventions that take advantage of new economic spaces for women opened by missing men

+

COMPLEMENTARY ACTIONS

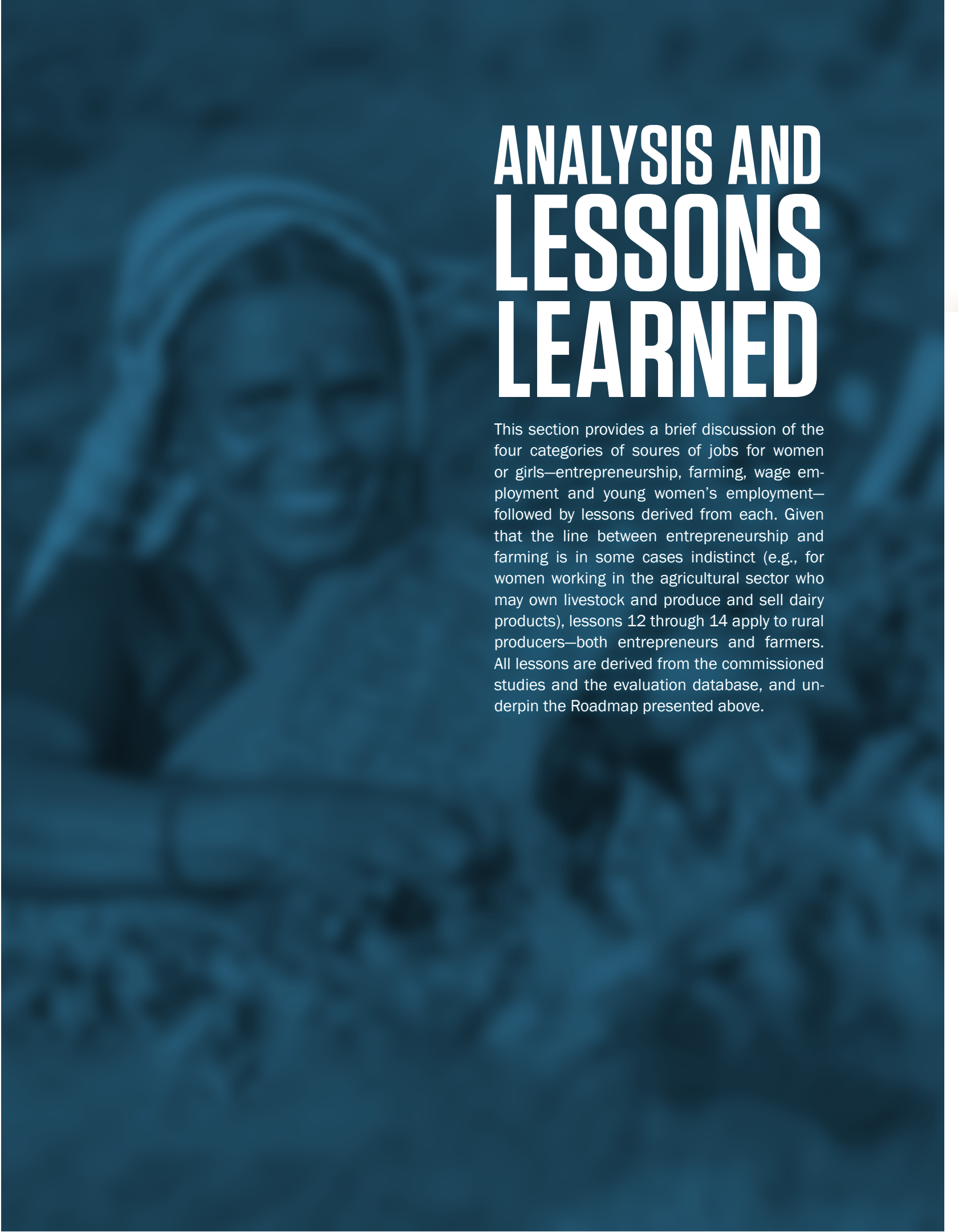
Family planning and basic reproductive health information and services
Investment in schooling, including accelerated learning programs and targeted programs to improve the school-to-work transition and skill deficits of young women
Interventions to address gender issues in conflict prevention (including gender sensitive Disarmament, Demobilization, and Rehabilitation programs, and programs to address the consequences of and prevent sexual and gender-based violence)

IN RESOURCE-RICH ECONOMIES AND SMALL ISLAND NATIONS, REGARDLESS OF THE SPECIFIC COUNTRY SCENARIO, INTERVENTIONS WILL MOST LIKELY WORK IF THEY DO THE FOLLOWING:

Identify and develop domestic and niche export markets that can be accessible to women producers
Ensure that women-owned small and medium enterprises (SMEs) and commercial farmers have access to productive resources (capital, technologies and land) so they can profitably operate outside the natural resources sector
Strengthen women's autonomy through clever project design

²² Such as Afghanistan, Liberia and South Sudan.

²³ Such as Algeria, Democratic Republic of the Congo, the Caribbean Islands, and Samoa.



ANALYSIS AND LESSONS LEARNED

This section provides a brief discussion of the four categories of sources of jobs for women or girls—entrepreneurship, farming, wage employment and young women’s employment—followed by lessons derived from each. Given that the line between entrepreneurship and farming is in some cases indistinct (e.g., for women working in the agricultural sector who may own livestock and produce and sell dairy products), lessons 12 through 14 apply to rural producers—both entrepreneurs and farmers. All lessons are derived from the commissioned studies and the evaluation database, and underpin the Roadmap presented above.

Juana, a widow in her mid-fifties, has a well-stocked food-vending stall in a covered market in the large, bustling district of Comas, in Lima, Peru. She inherited the stall location from her mother and has managed the stall, where she has sold meat products and prepared food, for two decades. The morning we visited her, a young female employee and her niece were at work with her. Juana had recently been offered free group business training and individual advice through a few visits of a technical expert. She was not able to attend all the business training sessions (three hours weekly over three months) because the sessions were in the early afternoon and she often could not leave her business on time. But she did profit handsomely from the customized business advice, she reported.

A technical expert visited Juana's stall and gave her basic hygiene tips (clean white aprons for her and her employees and a new shiny countertop) and advertising suggestions (visible signs with food offerings and prices).²⁵ Juana was able to follow these tips easily and her business profits grew. Juana was very pleased and mentioned that while in the past she had access to credit through a cooperative, she had never before benefited from business training or expert advice.

GENDER GAPS

Entrepreneurship is a fundamental driver of economic growth. It is also a significant source of women's economic opportunity—employment and income generation—for both urban and rural women, especially in agrarian and urbanizing economies where wage employment opportunities for women are scarce. Entrepreneurship can cover a wide range of activities—from income-generating projects poor women undertake in their homes, to selling products on the street and in open markets by individual producers, to owning or managing a business in a fixed location with one or more employees, like Juana.

Companies owned or managed by women represent between 25 percent and 33 percent of formal sector businesses around the world and a larger percentage of informal sector businesses (Estrin & Mickiewicz, 2011). Informal firms, where women are over-represented, account for up to one-half of all economic activity in developing countries. They use informal financial systems that play an important role in providing business owners with access to services but are a second-best solution to formal bank finance (Ayyagari et al., 2012).

Women-owned firms are largely micro (up to five employees) or small (up to 50 employees) in size and are more likely to be home-based (Sabarwal et al., 2009). Women are more likely to be necessity entrepreneurs and less likely to be opportunity entrepreneurs. However, this relationship weakens as economic development opens up increased opportunities for women.

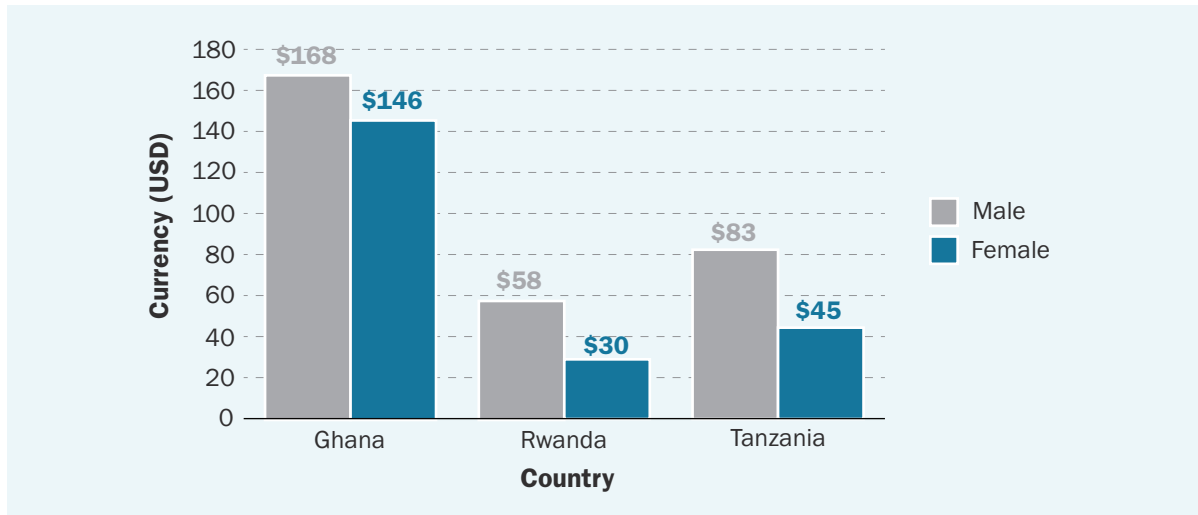
Research consistently finds that entrepreneurship performance (as well as participation) is lower for women than for men. An analysis of a rich cross-country data set for Ghana, Rwanda and Tanzania included in this report shows that self-employed men in all three countries average substantially higher monthly incomes than self-employed women²⁶ (Figure 2).

24 The section draws from the research commissions by Woodruff and McKenzie; Bandiera and colleagues; Gamberoni and colleagues; Doss and colleagues; Mehra and colleagues; and Knowles.

25 In the evaluation studies reviewed, customized business advice is referred to as technical assistance or consulting services.

26 See Gamberoni et al. in this report.

FIGURE 2: MEAN MONTHLY INCOME OF THE SELF-EMPLOYED, USD²⁷



A recent analysis of enterprise-level data covering more than 20,000 registered firms in manufacturing and services in 62 developing countries found that female-owned enterprises were significantly smaller (in terms of sales) than male-owned enterprises and concentrated in a smaller number of less efficient sectors. A larger number of female-owned firms were concentrated in the garment industry, wholesale, and retail trade, and very few were in electronics and IT communications technology, providing one major reason to explain performance gaps between the sexes (Bardasi et al., 2011). These differences in the size of the firm and sector of operation are pervasive and contribute significantly to the average performance differences between female- and male-owned firms (Box 3).

BOX 3: EXPLAINING GENDER DIFFERENCES IN FIRM SIZE AND PERFORMANCE

Two main arguments have been advanced to explain why women have smaller firms than men and in less efficient sectors: 1) differing preferences between men and women shaped by the traditional gender division of labor that assigns child rearing and homemaking responsibilities to women; and 2) legal, institutional and social constraints that women, but not men, encounter in the business world. A review of the recent evidence finds that in industrial countries individual choices or preferences more often explain gender differences in formal sector business entry and performance, while in developing countries external constraints in the business environment dominate, including credit constraints and property regimes biased against women (Klapper & Parker, 2011).

SOLUTIONS: WHAT WORKS FOR ENTREPRENEURS?

Policies: Solutions to bridge the gender gap in entrepreneurship span the policy and project environments. A supportive policy environment is important, and policy reforms need not be gender-specific to help boost entrepreneurship among women. Policies that strengthen the rule of law by clamping down on corrupt practices such as bribery payments, or those that encourage the formalization of businesses by simplify-

ing the paperwork required for business registration, benefit all.

However, additional policy reforms targeted to women are required to bridge the gender gap. They include changing legislation to give women equal property and other legal rights so they are on an equal playing field with men when investing in, starting and managing a business.

²⁷ See Gamberoni et al., p. 11, in this report.

Countries vary substantially in the rights they afford women in law and in practice. For example, a study that measured how regulations and institutions differentiate between women and men in ways that may affect women's incentives and capacity to work and start and run a business found at least one legal difference hindering women's economic opportunities in 103 out of 141 economies. The study revealed that while 38 mostly high-income economies had no gender-based legal differences, 24 others imposed 10 or more restrictions (IFC, 2011). Respondents at firms owned or managed by women in economies with legal differentiations report having to make more bribery payments to operate their businesses, suggesting that a lack of legal parity in these economies creates additional business costs for women (IFC, 2011).

Reforms to erase these legal and regulatory differences affect large numbers of women and are potentially transformative and cost-effective. They are not covered in more detail in this report since these reforms mostly require internal advocacy for public sector reform.

Programs: Program interventions targeted to women entrepreneurs include providing access to financial services, grants (cash or in-kind), physical assets or subsidies; business and managerial training, financial literacy, confidence building, and technical assistance through individual business visits; business networks or mentors; and easy access to information and networks using information technologies. Box 4 describes the limitations of this evidence.

These interventions all target the individual entrepreneur, and many have the goal, explicit or not, of morphing subsistence entrepreneurs (who turn to self-employment to provide subsistence income for themselves and families because no other jobs are available) into transformational entrepreneurs with the desire and ability to grow their businesses and create jobs for others (Schoar, 2010).

BOX 4: LIMITATIONS OF THE EVIDENCE ON GENDER AND ENTREPRENEURSHIP

There is growing evidence testing and documenting the impact of interventions seeking to boost the performance of enterprises run by female versus male entrepreneurs. Unfortunately, the evidence mostly studies impacts on microenterprises. There is a sizeable knowledge gap for women-led SMEs, particularly because in a given area there are often not enough women-led SMEs to obtain a sample size large enough to conduct rigorous studies, although some of the evidence from microenterprises can be extrapolated.

Another limitation of this evidence is the low statistical power many of the studies have to detect significant differences in the sample (when they occur in the population) because the samples are too small or heterogeneous, or because of high participant attrition rates that affect sample size and ability to detect real differences in the population, especially when they are not very large. The commissioned study by Woodruff and McKenzie shows this problem to be especially the case for evaluations of the effectiveness of business management training. They show that most of the 20 or so evaluations with rigorous designs (mostly in the form of RCTs) fall below acceptable levels of statistical power able to detect even a large 25 to 50 percent increase in firm profits. They are better able to pick up discrete outcomes, for instance, whether the firm survives or closes down as result of the training offered.

LESSONS FOR ENTREPRENEURS

Lesson 1: *Capital alone, as a small loan or a grant, is not enough to grow women-owned subsistence level firms. The binding external constraints women face compared to men limit the size and type of firms they operate, as well as the impact of capital alone on firm profits and growth.*

Poor women who run subsistence-level enterprises with average monthly revenues of about \$80-\$100, average profits of \$1 a day, and no paid employees fail to benefit in terms of business profits or growth from

micro loans or cash grants. Those studied received about \$100 to \$200 on average and do not invest as profitably as men who run microenterprises. These women, working in low-efficiency sectors with smaller businesses and with lower initial profits than men, often use portions of the cash obtained for household expenses and transfers to other relatives rather than for business investments. This is partly because women in poor households, unlike men, are expected to invest any windfall cash into the family (Banerjee & Duflo, 2011).

The commissioned reviews by Mehra et al. of 31 evaluations of microcredit and by Bandiera et al. of 19 recent field experiments concur that small injections of funds through grants or loans are ineffective in stimulating growth in the microbusinesses of poor women.²⁸ An earlier systematic review of 26 microfinance studies similarly showed no significant effect of microloans on women's business outcomes (Duvendack et al., 2011).

In contrast, capital alone increased the business profits of male-owned microenterprises operating somewhat larger businesses in more profitable sectors in both the Philippines and Sri Lanka—an effect that, in the case of Sri Lanka, was still evident five years after the cash was disbursed (Karlan & Appel, 2011; de Mel et al., 2012b).

Duvendack et al. (2011) argue that the lack of effect of microloans is because many women microloan clients are necessity entrepreneurs who turn to self-employment because no other jobs are available, and may be better off in wage employment. De Mel et al. (2012b) add that women face social and time constraints that limit the types of businesses they operate and the impact of capital alone on business profits and growth.

Despite its lack of impact on business growth for subsistence-level entrepreneurs, microfinance remains an effective tool for meeting the demands of millions of self-employed women otherwise underserved by financial sector providers. Microfinance moves money and speeds transactions and has reached millions of poor women with a useful service—a significant achievement in terms of reach and scale.²⁹ Microfinance providers were among the first to realize the economic potential of poor women and successfully tailor the supply of financial services to their particular constraints. Today, more than 150 million mostly poor women worldwide can access microloans, and therefore avoid having to borrow from relatives, friends or money lenders at unreliable terms or prohibitive interest rates, or not borrow at all. Average global repayment rates around 97 percent, signal the success of microlending in providing a service that meets the needs of poor women (and men) and are a key factor in its sustainability (Banerjee & Duflo, 2011; Karlan & Appel, 2011).³⁰

Given the continuing demand for microloans and the large number of women who are still unbanked, there is ample room to improve the design of microfinance

(Box 8). In addition, financial sustainability of many microfinance products is still in question, especially the continued dependence on subsidies and the tradeoffs between covering costs and reaching large numbers of poor women. Avenues to reduce microcredit unit costs include further adjusting microcredit practices to respond better to women client needs and, therefore, improve performance.³¹

Lesson 2: *For self-employed women in subsistence-level work, more is better. A relatively large capital transfer, if paired with income generation training and follow-up technical visits, can transform occupational choices of very poor women, and can be cost-effective.*

In their commissioned study, Bandiera et al. show that a large capital transfer (most often a cow or other livestock with an asset value of about \$140), intensive asset-specific training, and regular follow-up visits by an asset specialist and program officers from BRAC, the implementing organization, during a two-year period have a significant, transformative impact on the occupational choices of very poor women in Bangladesh.³² A randomized evaluation of a BRAC ultra-poor program after a two-year interval showed that very poor women changed occupational choices from casual day labor to self-employment and increased earnings by 34 percent relative to baseline.³³ Although all the women included were very poor, the effect was still largest for women who had the highest relative earnings at the start.

Two evaluations of very similar pilots for the ultra-poor in India, one in West Bengal and one in Andhra Pradesh, which Bandiera et al. reviewed for this report, yield findings in line with those of the Bangladesh program (Banerjee et al., 2011; Morduch et al., 2012). Both pilots were implemented in rural villages and targeted the poorest women. They provided women with a large asset transfer (most often livestock) and intensive training to manage the asset. In West Bengal, the average monthly per capita earnings of households who received the asset had increased by 21 percent when it was measured 18 months after the program. In Andhra Pradesh, the households that received the asset spent significantly less time in subsistence agricultural wage labor relative to controls three years after the program and more time in self-employment, where earnings were greater.³⁴

28 See Mehra et al. and Bandiera et al. in this report.

29 See Mehra et al. in this report.

30 See Mehra et al. and Knowles in this report.

31 See Knowles in this report.

32 See Bandiera et al. in this report.

33 At baseline, only seven percent of the women in the study could read and write, 37 percent were heads of household, 38 percent were sole-income earners and only 46 percent were in households that could afford two meals a day in the past two years.

34 In the Andhra Pradesh pilot, simultaneous implementation of a government program increased monthly incomes of agricultural wage workers, confounding identification of the effect of the pilot in transforming poor women's occupational choices. Monthly earnings of both treatment and controls increased by 66 percent over three years (see Bandiera et al. in this report).

These evaluations show that access to capital in the form of a physical asset is effective with very poor women and not limited to the top performers, as might be expected. However, targeting this group requires more intensive investments and some hand-holding in terms of skills acquisition and follow-up visits.

In addition, the nudge of a comparatively large, physical asset is needed. The term “nudge,” from behavioral economics, refers to the fact that changing the way choices are presented can nudge people to make decisions that are better for them, while maintaining their freedom of choice (Thaler & Sunstein, 2009). In this example, the in-kind asset functions as a nudge

because it is difficult to portion off and share (a cow, for instance, instead of a flock of chickens), nudging its recipient not to divert the capital to non-business uses.

Bandiera et al. reviewed the available evidence for cost-effectiveness to assess whether the benefits of undertaking programs that involve large transfers of capital and/or skills to very poor women are worth the costs.³⁵ Though only five of the 19 studies they examined (including their own) have data about costs, returns from these interventions are compared to yields from savings accounts and show that these programs, indeed, are worth the costs. Table 3 below shows the results of this cost-effectiveness comparison.

TABLE 3: COST-EFFECTIVENESS OF PROGRAMS TRANSFERRING CAPITAL AND/OR SKILLS

STUDY	COST PER BENEFICIARY (USD)	ESTIMATED RETURNS	METHODOLOGY USED FOR ESTIMATE	BOTTOM LINE
Attanasio et al. (2011) ³⁶	750	12%–20.5%	Impact on wage and salary earnings throughout individual’s earning lifetime.	Program yields higher returns relative to the real interest rates in Colombia at that time (6–7%).
Bandiera et al. (2012)	300	7.5% Annual	Aggregate earnings from all business activities during past year. Estimated return corresponds to increase in average earnings per beneficiary.	Program is preferred to an unconditional cash transfer of similar size invested in a savings account (4.5%) in Bangladesh.
Banerjee et al. (2011)	331	27% Annual	Earnings correspond to income of the household in a typical month. Estimated return corresponds to increase in average monthly earnings per beneficiary household, aggregated to yield the return rate.	West-Bengal Program is preferred to an unconditional cash transfer of similar size invested in Indian fixed deposit account (10%).
de Mel et al. (2008, 2009, 2012a)	100–200	0%	Returns to capital are estimated by instrumenting for capital in a regression of monthly business profits with the transfer size.	Transferring capital alone to small female-owned businesses in Sri Lanka fails to generate returns in terms of business profits.
de Mel et al. (2012a)	Training: 126–140 Capital Transfer: 129	8% return to training	Cost-benefit analysis only for the potential business owners sample; authors report the amount of time it would take for the returns to be sufficient to cover the costs of the two treatment types respectively.	For the potential business owners sample, the training-only treatment costs would be repaid after 12 months if treatment effect was sustained, but the training plus cash cost would take 48 months to be repaid.

³⁵ See Bandiera et al. in this report

³⁶ See references for full citations.

Lesson 3: *Capital alone can work if it is delivered in-kind (e.g., inventory) to more successful (or profitable) women microentrepreneurs, with larger micro-businesses (closer to the size of men's businesses). In-kind capital seems to nudge women to keep the money invested in the businesses.*

The evidence suggests that capital delivered in kind (e.g., purchase of livestock or inventory) rather than as cash works for women-owned microenterprises with firms that are above subsistence level in size; that is, those with higher initial profits than other firms that are closer in size to male-owned microenterprise firms. Large gains in profit for female- (and male-) owned microenterprises in urban Ghana were achieved when an in-kind transfer of capital (i.e., purchase of inventory) acted as a nudge for the recipient women to keep a future business orientation and not to divert the money to more immediate uses (Fafchamps et al., 2011).

Lesson 4: *Financial services delivered through mobile phones are less costly and may be more effective than other delivery mechanisms in increasing women's business investments.**

An experiment in 26 rural communities in Western Kenya shows that when investment income is visible, women invest less than when it is hidden. This tendency is more pronounced when relatives are present. Women in the experiment behaved as if they were expected to share four percent of their cash income

with others, and this was substantially more when a close kin was present. This “kin tax,” applicable only to women (there was no effect for men) may be large enough to distort investments toward less visible, but perhaps less profitable investments than more visible ones, and discourage business expansion (Jakiela & Ozier, 2012).

By helping to protect the privacy of individual choices, mobile phones may provide women with the sufficient autonomy and independence from social pressures to invest cash in the business rather than in the extended family. In a randomized evaluation of a cash transfer program delivered to poor women via mobile phones in Niger, Aker et al. (2011) found households that received the cash via mobile phones purchased a more diverse set of goods, depleted fewer assets in times of shock and grew more types of crops, especially marginal cash crops grown by women. The researchers hypothesized that these positive outcomes were the result of the low cost of using the mobile phone to transfer cash and the greater privacy the mobile phone gave women to elect how to spend the transfer.

The Niger study found a mobile payment (cash transferred via a mobile-based payment system) to be more cost-effective than traditional cash transfers (Aker & Mbiti, 2010; Knowles in this report).

However, women in developing countries have less access to mobile phones than men do, as noted in Box 5.

BOX 5: WOMEN'S ACCESS TO MOBILE PHONES

Mobile phones provide many benefits for women, including access to information, services and the privacy, safety and independence that mobile connectivity can allow. Mobile phones are particularly helpful to women entrepreneurs, who may use their phones to conduct private financial transactions and seek market information.

Too few women, however, can take advantage of these benefits. Globally, a woman is 21 percent less likely to own a mobile phone than a man. This gender gap in ownership widens to 23 percent if she lives in Africa, 24 percent if she lives in the Middle East, and 37 percent if she lives in South Asia. Thus, closing the gender gap in mobile phone ownership would bring the benefits of mobile phones to an additional 300 million women (Cherie Blair Foundation, 2010).

To better understand and promote women's access to mobile technologies, the Cherie Blair Foundation for Women's (CBFW) Mobile Technology Program has partnered with GSMA's mWomen Program, USAID and others to pursue needed research.³⁷ CBFW has also partnered with the ExxonMobil Foundation to explore ways in which mobile value added services (VAS) can address the business challenges women entrepreneurs face globally and implement and scale these services in Egypt, Nigeria and Indonesia (*ExxonMobil, Booz&Co, Cherie Blair Foundation, 2012*).

37 For full reports by the Cherie Blair Foundation, see: Women and Mobile: A Global Opportunity, February 2010. http://www.cherieblairfoundation.org/wp-content/uploads/2012/07/women_and_mobile_a_global_opportunity.pdf (GSMA Development Fund, Cherie Blair Foundation, Vital Wave Consulting,); Women Entrepreneurs in Mobile Retail Channels, December 2011. <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/Women-Entrepreneurs-in-Mobile-Retail-Channels.pdf> (Cherie Blair Foundation, Saudi Telecom Company, TNS Global); and Mobile Value Added Services, May 2012. <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/Mobile-Value-Added-Services-digital-report.pdf> (ExxonMobil, Booz&Co, Cherie Blair Foundation)

* Megan Zella Rounseville conducted a literature review of impact evaluations of mobile phone interventions, commissioned for this project, which was used as the basis of the findings on mobile phones.

Lesson 5: *Business training, in the way it has been delivered in the studies to date, improves business practices but has few measurable effects on the growth of women-owned subsistence level firms.*

Business training can be delivered in many different forms. Most commonly, training is offered by microfinance organizations or banks; individuals can also apply for training, or it can be offered to firms in a particular industry or cluster of industries. Among the studies reviewed, participants' average age was 35 to 45. There was substantial variability in educational levels, from 2.5 years of schooling for women in Pakistan to university-level training in a few studies. Some pilots offer training to females only, others to mixed groups of females and males. The length and quality of training courses vary considerably as does the depth and breadth of the business topics covered. This heterogeneity in business training modality, which Woodruff and McKenzie describe in detail in their commissioned study, complicates the task of measuring its impacts.

The systematic analysis by Woodruff and McKenzie of 20 evaluations of business training interventions for this research project, and the complementary review by Bandiera et al. of field experiments that combine business training and capital transfers, take into account the heterogeneity in training modality. They conclude that business training improves business practices for women microenterprise owners but has few measurable effects on business survivorship or profits.³⁸ Evidence for this comes from evaluations across a wide spectrum of countries, including Bosnia and Herzegovina, Pakistan, Peru, Sri Lanka and Tanzania.

In Pakistan, for instance, a field experiment that gave business training and a lottery to access business loans improved the business knowledge of both male and female entrepreneurs, but had little effect on business outcomes for women. (The training had some effects for men.) This suggests that women with lower-quality businesses, more time constraints and little control over the business need more intensive interventions (Gine & Mansuri, 2011).

Similarly, a field experiment that provided business training and a small grant to microentrepreneurs in Tanzania increased the business knowledge of both female and male entrepreneurs, but increased the profits of male-owned firms only. The lack of positive outcomes for women was attributed to their more binding external constraints (i.e., their greater household duties and limited say in household decisions) and their presumed reluctance to compete (Oppedal Berge et al., 2011).

Business training seems to have more of an impact on revenues and profits for business start-ups. Training helped women who were out of the labor force start enterprises in Sri Lanka more quickly. Getting these women to start businesses was easier than getting these businesses to grow (de Mel et al., 2012a). Also, business training increases microloan repayment rates.³⁹

As previously mentioned, however, the varying nature and quality of business training programs, low uptake and small and heterogeneous samples make the task of detecting anything but very large effects difficult in the evaluations that have been conducted to date (see Box 4). It may be that smaller effects would be detected with larger and more homogeneous samples.

It may also be that business training that better accommodates time constraints would help reduce women's high attrition rates, increasing their participation. This would have the added benefit of increasing the size of samples for evaluation studies, since attrition is a significant reason samples in these studies are small. Recall that Juana, the Peruvian microentrepreneur mentioned at the start of this section, had trouble attending all the training sessions because of limited time.

Although no study has shown the impact of technical visits alone, technical visits may accommodate women's time constraints by ensuring the new skills learned are specifically related to the binding constraints they face. Based on the evidence to date, our assessment suggests that technical assistance is valuable to women for this reason.

Lesson 6: *Promising ways to improve the impact of business training include increasing the quality and duration of the training, following up the training with customized technical visits or expert advice to the firm, and targeting women running larger sized firms.*

While the length of business training programs varies substantially across studies, two to three-day training programs are common. Independent of the quality of the training, short courses are likely to have less impact than longer training. Supporting the notion that high-quality training of reasonable duration can make a difference; a six-week, fully-subsidized, high-quality basic business education for female microentrepreneurs in rural Mexico had noticeable effects. Profits of poor female food producers and vendors with an average of \$37 weekly profits increased about 24 percent, largely through improved accounting practices (Calderon et al., 2012).

38 See Woodruff & McKenzie and Bandiera et al. in this report.

39 See Woodruff & McKenzie in this report.

To improve the impact of business training on the growth of female-owned firms, Woodruff and McKenzie's study suggests following up on the training with technical visits or expert advice tailored to the firm. A credible study found that the combination of training and tailored business advice offered to Juana and other female microentrepreneurs in Lima resulted in an average 19 percent increase in business sales. The sales of women entrepreneurs who instead were exposed only to business training did not grow significantly when compared to controls. However, this customized advice from an expert who visited the firm to diagnose problems and offer simple solutions (averaging five or six hours of visits per firm), cost twice as much as the training alone (Valdivia, 2011).

Supporting the notion of the impact of tailored advice to firms, one-on-one consulting services or tailored advice with mentors in Puebla, Mexico had a large impact on the performance of micro, small and medium enterprises. Monthly sales went up about 80 percent, and profits and productivity increased by 120 percent a year after the service was provided. Seventy-two percent of the firms were male-owned, however, and there was an issue of uptake of the consulting services, especially for women. Even when the service was subsidized, firms did not participate because of lack of funds and uncertainty about benefits (Bruhn et al., 2012).

Woodruff and McKenzie also suggest that quality business training on its own may work better for large versus small firms. In the case of large firms, a small percentage increase in profits may be enough to justify the costs of business training, especially if the impacts last, because the costs of training often increase less than proportionally with the size of firms undergoing training. This hypothesis needs further testing.

One evaluation of business training for firms in El Salvador, Guatemala and Nicaragua with an average of ten employees had a significant impact on the probability of starting and expanding businesses, but the effect was stronger for male-owned than female-owned firms (Klinger & Schündeln, 2011). New programs offered by developing country banks have provided business management and financial literacy, along with financial services, to women-owned SMEs with promising results, although no rigorous evaluation data is yet available (GPFI & IFC, 2011).

Xu and Zia (2012) suggest that business training has better results with women-owned SMEs, when com-

pared to women-owned microenterprises. They further advise targeting motivated, self-selected women entrepreneurs to increase the impact of training programs.

Suggestive evidence for this is found in a case study evaluation of the Goldman Sachs 10,000 Women initiative in India. One hundred and fifty hours of training in enterprise and business management provided by the 10,000 Women initiative in India improved women's business practices and skills and appeared to have a role in strengthening business performance and confidence. In addition, large increases in business revenues were observed. It was not possible, however, to know with certainty if the growth in revenues was a result of the training, accompanying strong economic growth, a selection process that chose businesses primed for growth, or a combination of these factors (ICRW, 2012).

Ensuring the effectiveness of training is particularly important given the significant in-country demand from implementing organizations, as shown in an analysis of proposals submitted to the UN Women's Fund for Gender Equality (Box 6).

Lesson 7: *Savings accounts, including microsavings, are being proven to increase the earnings of self-employed women. Women seek savings vehicles and use their own personal savings to start or invest in businesses.*

There is growing consensus that providing women and girls with access to reliable savings products is a smart investment.

Karlan and Appel (2011) single out micro-savings as one of seven ideas that work or is being proven for increasing the incomes of the poor globally. They argue that savings accounts can make a big difference in the lives of the poor, helping to overcome inertia not to save and, in particular, women's status and authority is elevated by savings, whereas credit has yet to exhibit such impacts.

The commissioned study by Mehra et al. concludes that savings is the one financial service that has shown a positive impact on women's business profits and expenditures, although the rigorous evidence is still limited.⁴¹ Similarly, Knowles' commissioned study rates rural savings interventions as promising to improve rural women's productivity.⁴² In their study, Gamberoni et al. show that differences between men and women in having savings accounts explained the largest proportion of the gender gap for entrepreneurs

40 See Mehra et al. in this report.

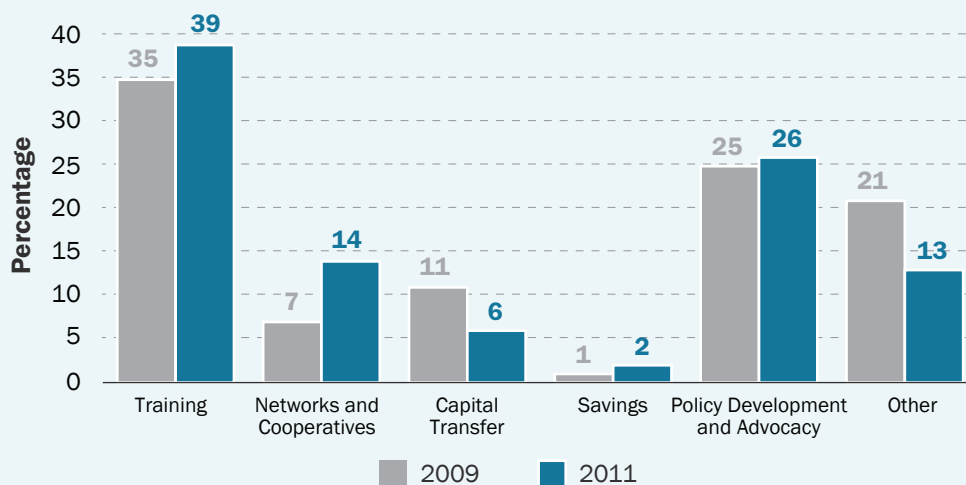
41 See Mehra et al. in this report.

42 Knowles uses a stricter ranking system than we use in the Roadmap for Action, given positive but limited evidence on effectiveness and cost-effectiveness.

BOX 6: DEMAND FOR CAPACITY DEVELOPMENT

An analysis of global demand for women's economic empowerment programs in response to a call for proposals from UN Women's Fund for Gender Equality (FGE) reveals that the demand for capacity development, including business, vocational and livelihood skills training, exceeds the demand for other areas of support. FGE framed the call for proposals within a rights-based, women's empowerment framework that may have shaped the content of the proposals received.

The following chart shows a comparison of the demand for various types of interventions in proposals submitted during the 2009 and 2011 grant cycles. Proposals typically listed multiple interventions; the analysis coded the top three interventions, defined by the order in which they were listed. Six hundred eighty-three proposals submitted in 2009 yielded 1,634 interventions for analysis; in 2011, these figures were 561 and 1,465, respectively.



Thirty-nine percent (or 1,224) of interventions proposed across both grant-making cycles were requests for training in the context of capacity development, including awareness-raising on gender issues and women's rights. Of these, 31-37 percent (2009 and 2011, respectively) proposed training in income generation activities, 31-22 percent proposed business management training, 21-16 percent proposed training related to gender issues and women's rights, and 10-19 percent proposed training in soft skills. Only 4-3 percent proposed training for wage employment, and 3-3 percent proposed training for jobs not traditionally held by women.

in both Ghana and Rwanda, suggesting that access to savings is strongly correlated with business success.⁴³

Further analysis by Gamberoni et al. for Ghana, where panel data was available and changes could be tracked over time, suggests that access to savings may be especially important to increase the profits of the smallest, subsistence-level women entrepreneurs, shifting performance from losses to profits.⁴⁴

Although the experimental studies to date do not provide evidence on the mechanisms by which savings increases women's earnings, some outcomes mea-

sured shed light on reasons why savings may work. One study showed that women with access to savings accounts invested 45 percent more in their businesses and were less prone to sell business assets to deal with health emergencies (Dupas & Robinson, 2009). The positive effects of the savings were sustained in a follow-up survey conducted three years later, showing that savings interventions can have lasting effects (Dupas & Robinson, 2013).

Saving requires discipline and might elicit a greater sense of personal ownership among women, as compared to loans or grants, which are viewed as more of

⁴³ There was no data on access to saving accounts for Tanzania, the third country in this three-country study on subsistence versus transformational entrepreneurs.

⁴⁴ See Gamberoni et al. in this report.

a windfall. This would make them less likely to divert savings intended for a business investment to household expenditures or to relatives. In the event of a shock (to the household or business), savings provides a cushion, avoiding the need to liquidate a business especially at a time when one is least likely to qualify for a loan. Further, savings are beneficial for more risk-averse women who may not be comfortable with the repayment and interest requirements of a loan.

Women's demand for formal savings accounts is clear. In urban Ghana, more than half of women microentrepreneurs use a *susu* collector (an informal mobile savings vehicle), even when they must pay for the service (Fafchamps et al., 2011). In Guatemala, female microfinance borrowers were significantly more likely than their male counterparts to open a commercial savings account (Atkinson et al., 2010). In Western Kenya, women made use of savings accounts through village cooperatives far more than men did (Dupas & Robinson, 2009).

Both a global database on people's use of financial services (Demirguc-Kunt & Klapper, 2012) and the data on savings analyzed by Doss et al. in their commissioned study show that women use individual savings, distinct from household savings, for business investment purposes (Box 7). The Doss et al. study showed that more than one-third of women in Ecuador and 60 percent of women in Ghana finance businesses with their own savings (rather than savings they own jointly with husbands).

Market research can usefully test both savings and loan products that different categories of women clients demand (by occupation and income levels, for instance), and can contribute to the design of products more appropriately tailored to women entrepreneurs.⁴⁵ Box 8 illustrates the efforts of Women's World Banking, an NGO that provides financial services for women, to adjust financial products to meet women's needs.

BOX 7: WOMEN AND MEN SAVE DIFFERENTLY

1. The Global Findex Database that measured the use of financial services in 148 economies, representing 97 percent of the world population, finds that 36 percent of adults save globally and 25 percent do so in a bank. It also finds that significantly fewer women than men have bank accounts. Informal saving systems, which are used more by women than by men, come with a significant cost to those who save, including risk of fraud and collapse (Demirguc-Kunt & Klapper, 2012).
2. A pioneering study of saving behavior with representative samples of males and females in Ecuador, Ghana and the state of Karnataka, India, analyzed for this report, shows that between 28 percent and 36 percent of those interviewed in the three countries have formal savings, while eight percent to 24 percent have informal savings. Men save more in the formal system, while women save more informally. In Ghana a higher proportion of urban women (33 percent) than rural women (20 percent) have only informal savings. In Karnataka the reverse occurs—26 percent of rural women save, compared to 16 percent of urban women. A sizeable number of women keep cash savings at home (Doss et al. in this report).

BOX 8: ONE SIZE DOES NOT FIT ALL

The design of financial products based on client preferences is essential to allowing women to access credit and save. Market research can provide rich insight into financial behaviors, the life experiences that shape those behaviors, and thus the financial products with greatest potential to help women achieve success.

FINDINGS FROM MARKET RESEARCH

Women's World Banking, an umbrella NGO, and its network of financial institution members have spent years surveying women clients and translating this market intelligence into effective product design. Their research has shown that the return on investment is justified, especially as competitive pressures in the financial services market increase, and that women remain loyal customers of the institutions that first offer the services they need.

⁴⁵ See Mehra et al. in this report.

Low-income women often believe they are “too poor to save,” a perception that can easily become a self-fulfilling prophecy. If women are accustomed to saving at home or with an informal group, they may not perceive the relevance of saving in a bank. In many countries, suspicion of banks is well-founded as the savings products available are poorly suited to the needs of low-income women, with high fees that quickly consume small savings balances.

Additionally, Women’s World Banking consistently found that many women microfinance customers disliked group-based lending products. The more entrepreneurial women, especially, resented the long hours away from work that group meetings required, and they disliked having to guarantee their neighbors’ loans.

DESIGNING WOMEN-FOCUSED OFFERINGS

A critical success factor for developing products to meet women’s needs is to understand different market segments and what motivates them. These different segments of women value some similar attributes, particularly confidentiality, convenience and the assurance that bank fees will not devour the savings they accumulate. They also want the bank to show them a financial plan. Beyond this, though, there are differences in these segments that should prompt financial service providers to test product features to address their varied needs, including differing maturities, flexibility in access (e.g., programmed savings, time deposits or transactional savings) or even a rewards program or lottery as an incentive to save.

In September 2011, Women’s World Banking launched a project in Colombia, Paraguay and Peru to address the financial needs of rural women by providing individual loans based on better cash-flow analysis. All three of the Women’s World Banking financial institutions participating in the project had already been working in rural communities, but they realized they were not reaching women. When the cash-flow analysis of these households was compared against client interviews with the women, a striking contradiction emerged. The women’s economic contributions to their households were viewed as unimportant relative to the main cash crop contributions (usually the husband’s purview). In reality, the woman’s income was often significant in absolute terms, and it also played a critical role in smoothing cash flow and maintaining family well-being during the off-seasons.

Women’s World Banking together with financial services providers developed a loan that can be issued to any client who has a productive activity, with minimal documentation requirements and flexible terms and collateral. Flexible collateral is important for women because assets, particularly land, are traditionally owned by men. Early feedback indicates that women clients are proud that the loans are in their own names and that loan sizes are considerably larger than the traditional microfinance group loan.

Similarly, one network member in the Dominican Republic designed a “buddy system” allowing women not yet successful enough to qualify for individual loans to pair up and bypass group lending, guaranteeing only each other and eliminating the burdensome group meetings.

ENSURING ACCESS

Mobile phone technology and other alternative delivery channels (ADCs) have the potential to go further in giving women greater control over their financial futures by giving them direct access to financial services. This can help women save by allowing them to deposit regularly. The emergence of the mobile phone as a low-cost means to conduct financial transactions represents a significant breakthrough in democratizing access to financial services. Additionally, ADCs can allow financial institutions to reach more remote markets that may otherwise be too costly or difficult to serve. Women’s World Banking is testing ways for local merchants to accept deposits through point-of-sale terminals, as well as using mobile phone banking as a savings tool.



Josephine Okot is the Managing Director of Victoria Seeds, one of the largest seed companies in Uganda. She started the company in 2004 with five employees. Today, the company has more than 100 employees, conducts seed research, production and processing, and markets more than 90 seed varieties to local and regional export markets. Josephine, the recipient of numerous international agricultural prizes, says that getting started was hard. Her biggest challenge was access to finance. She could not raise funds from private banks and was only able to do so when a USAID program guaranteed her loan.

Josephine seeks to empower smallholder female farmers in post-conflict Northern Uganda. Many are female heads of households who have lost husbands to the violent conflict. Josephine provides female farmers with credit (in the form of seed loans, input loans and production equipment) as well as skills training so they can become commercial farmers. She has enlisted the Agriculture Ministry to offer extension services to female farmers so they can adopt good farming practices.⁴⁷

GENDER GAPS

Farming has always been a key occupation for women in developing countries. But most female farmers have farmed food crops for home consumption rather than cash crops. Successful commercial female farmers who have switched into profitable crops traditionally controlled by men remain the exception, and there is much to learn from them.

In recent decades, women's presence in farming has only continued to grow with the increased importance of agro processing and export horticulture, and the creation of global agricultural supply chains linked to supermarkets. But this growing presence has not translated into their growing power in the agricultural sector. Compelling evidence shows that female farmers overall are less productive than male farmers. Translated into yields, the estimated gap between females and males clusters around 20 to 30 percent lower yields for female farmers (FAO, 2011).

The commissioned study by Dimova and Gang explored the characteristics associated with profitable female commercial farmers in Malawi. They find that female headship and land ownership are associated with females cultivating profitable cash crops. In addition, these female farmers are more often found in villages with savings and credit unions and other village development agencies, and where women have access to credit.

Using a rich representative household survey of about 10,000 observations, their research on female cash crop producers in Malawi finds that women's entry into cash crops improves agricultural efficiency and enhances family welfare more than reliance on food crops, as long as women farmers have the autonomy to make decisions both about what to grow and how to spend the earnings from farming.⁴⁸

There is substantial knowledge of the reasons behind women farmers' lower productivity and earnings when compared to men's: they farm smaller plots, often not their own (Box 9); face legal restrictions and lack secure tenure to land; grow predominantly food crops rather than cash crops (although they contribute labor to the latter); and have restricted access to rural markets, institutions and services, including agricultural extension, technologies and financial products. When access to land and productive inputs are taken into account, these gender differences in farm productivity disappear (WDR, 2012).

FAO (2011) has estimated that if women had the same access to productive resources as men, their increased yields could raise total agricultural output in developing countries by 2.5 to 4 percent, which could in turn reduce the number of hungry people in the world by 12 to 17 percent.

SOLUTIONS: WHAT WORKS FOR FARMERS?

There is far less solid evidence for policies and programs that have increased women's productivity and earnings in agriculture or transitioned women into commercial agriculture, compared to that available in entrepreneurship or wage employment (Quisumbing & Pandolfelli, 2010).

The widely accepted ingredients for success include reforming legislation, so that women have equal rights under the law; strengthening rural institutions to work for women, including accessible infrastructure (roads and electricity); providing agricultural training, extension and financial services; freeing women's time through labor-saving technologies; closing the information and technology gaps by providing women with access to improved seeds, fertilizer, and mobile technologies; and supporting women's collective action (e.g., self-help groups and cooperatives) to help them

46 This section draws on research commissions by Rodgers and Menon; Dimova and Gang; Doss and colleagues; Quisumbing and colleagues; and Knowles.

47 Based on Sir Gordon Conway, "Victoria's Not So Secret Seeds," *Huffington Post* 17/11/11; and Jaco Moritz's "How We Made It in Africa" blog 3/22/11.

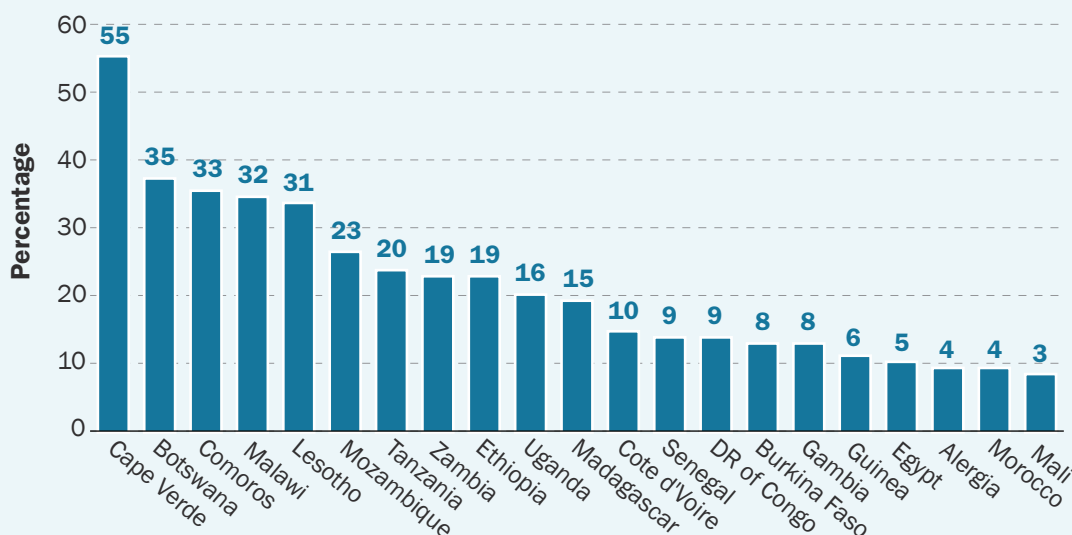
48 See Dimova & Gang in this report.

BOX 9: FEW WOMEN OWN AGRICULTURAL LAND

FAO 2011–2012 data for 45 countries spread across three developing regions shows that the percentage of individual landholders who are women is lower than 30 percent in most countries. The exceptions are Cape Verde (50 percent) and another four countries in Sub-Saharan Africa with scores slightly higher than 30 percent (Rodgers & Menon in this report).

PERCENT OF INDIVIDUAL WOMEN LANDHOLDERS

From Menon et al., this report



diversify production, access markets and achieve scale (FAO, 2011; WDR, 2012).

But few of these interventions have been rigorously evaluated. We have supplemented the available evidence on the impact of policies and programs with two other sources of information to round out the discussion of interventions for women in agriculture. These other sources are: (a) a mapping of current good practice—the most frequent, preferred interventions that major development agencies carry out to increase women’s productivity and earnings in agriculture; and (b) an inquiry into what explains or is associated with women’s success in “crossing over,” or transitioning from mostly subsistence farming to high-value commercial farming. What follows are lessons that can be gleaned from this evidence, starting with those applicable to women farmers.

Lessons 9 through 11 are based on preliminary evidence by researchers participating in this project and a compilation of good practices. They are not less promising than the first group of lessons on entrepre-

neurship, but have much less detailed information, especially on the characteristics of women farmers and on measurable outcomes. They need further testing and confirmation.

Challenges to farming are intertwined and many, and farming solutions are context-specific. They must rely on local knowledge, which makes the task of identifying general lessons difficult. Added to this difficulty is that the available rigorous evidence is thin. The section ends with three lessons that are common to rural women producers, both entrepreneurs and farmers.

LESSONS FOR FARMERS

Lesson 8: *Interventions that give women more formal control over farmland are proven to increase the productivity of women farmers and, more generally, their economic security. However, implementation needs to pay attention to social and local contexts.*

The means through which men and women acquire land include inheritance, participation in land sales

and rental markets, government land titling and registration programs, state-driven land reform and resettlement schemes. Women can own land individually (especially when they are heads of farm households) or jointly with their spouse.

Rodgers and Menon's commissioned review of more than 15 empirical studies from different regions finds that granting women land rights is strongly associated with increases in the productivity of women farmers and their economic security and autonomy.⁴⁹ Successful large-scale land registration programs in Ethiopia and Rwanda had large positive effects on land investments and farm yields, especially among female-headed farm households (Deininger et al., 2011; Ali et al., 2011). Joint land titling can have similar productivity and empowerment effects on women as land titling in the woman's name alone, as emerging data from Ethiopia, India and Vietnam shows (Deininger et al., 2011; Deininger et al., 2008).⁵⁰

Secure land rights increase investments in land fertility, have empowerment effects for women within families, and reduce the vulnerability of women and households to economic shocks.⁵¹ Menon and Rodgers, in an analysis for this project, found that land-use rights held by women in Vietnam had a number of beneficial effects, including higher household expenditures (per capita expenditures were 5.3 percent higher than average when certificates were held by women and 3.6 percent higher when they were held by men), higher education for women and lower daily hours of housework.⁵² However, their effect on increasing women's access to credit—often a major reason for arguing that women need land titles—is less clear; positive effects have emerged for relatively better-off households only.⁵³

Conversely, the lack of tenure security in Ghana led women farmers to invest less in soil fertility, resulting in substantially lower profits per hectare for women's plots, when compared to men's (Goldstein & Udry, 2008).

Similarly, preliminary results from horticulture value chain projects with women farmers in Burkina Faso (home gardens) and Uganda (sweet potatoes) show that increased yields are used for home consumption rather than marketable surplus because women may not own the land where vegetables are grown or are not the primary decision makers for land on which sweet potatoes are grown.⁵⁴

Knowles more specifically reviews the evidence on effectiveness, cost-effectiveness and sustainability of land registration programs and rates this intervention as promising for women.⁵⁵ He quotes large variations in cost-per-land parcel registered in different schemes and concludes that simpler, community-based procedures used in large-scale programs like the one in Ethiopia, where six million land titles were issued, are worth the costs, while more complex, centralized computer-based registries are not. Other research has shown the costs of adjusting an existing land titling operation to allow for the name of the wife to be included in land certificates along with the name of the husband to be negligible (Deininger et al., 2011). But social norms and informal institutions, building on different marital property regimes (separation of property, community property, partial community property), matter for the benefits of land titling programs to be realized. Land rights need to be guaranteed in such a way that women can exchange, lease, bequeath, sell or mortgage their land in an enforceable manner.

For instance, in Vietnam, land tenure reforms impacted rice yields positively in the case of male-headed farm households but not female-headed ones, possibly because land rights were not viewed the same when women owned the title, which may have restricted their access to credit (Van den Broeck et al., 2007).⁵⁶ In Zambia, government decrees to protect the security of land of female widows as a result of the HIV/AIDS epidemic had little to no enforceability because local authorities were bypassed when the decrees were developed and enforced (Chapoto et al., 2011). Owning the asset (land) may not always mean the owner controls the asset, as the commissioned study by Quisumbing et al. about dairy and vegetable value chain projects with rural women shows.⁵⁷ In Bangladesh, for instance, men reported sole rights to sell property (livestock) that was jointly registered in both the names of husband and wife.

These and other cases, detailed in several studies commissioned for this project, highlight the importance of grounding land ownership processes in social and local contexts.⁵⁸

Finally, educating women and households about their land rights may yield high returns since legal knowledge associated with land rights determines farmers' land-related investments, and research shows that

49 See Rodgers & Menon in this report.

50 See Menon & Rodgers in this report.

51 See Rodgers & Menon and Quisumbing et al. in this report.

52 See Rodgers & Menon in this report.

53 See Menon & Rodgers in this report.

54 See Quisumbing et al. in this report.

55 Knowles' rating of promising rather than proven is based on the limited experimental evidence available.

56 See Menon & Rodgers in this report.

57 Quisumbing et al. this report

58 See Menon & Rodgers, Quisumbing et al., and Doss et al. in this report.

only a minority of land users have knowledge about these rights.⁵⁹ Alongside registration, educating women (and men) about their rights seems to be a particularly important and likely inexpensive intervention.

Lesson 9: *Farmer groups, associations or collectives can provide individual women producers with access to markets and help overcome constraints they face in meeting the demands of agricultural supply chains.*

Both the analysis of women's participation in agricultural supply chains and of good practice projects single out the importance of providing women farmers with access to markets and the role of female-only or mixed (female and male) groups or collectives in enabling individual producers to link to markets and achieve scale.⁶⁰

Farmer groups, associations or collectives can help women farmers overcome market failures (e.g., unequal access to information, assets and equipment), which make it difficult to diversify and engage in commercial farming. For instance, in the Quisumbing et al. study, farmer groups and women's networks disseminate extension messages in Uganda, helping to close the gender gap in access to information about new varieties and farm management practices.⁶¹ In addition to sharing information, groups can share funds and costs. Producer groups in Bangladesh have used group savings to purchase dairy cows in the groups' name, for example.

A recent study by Oxfam International finds that group membership grows the revenues of women farmers in Ethiopia, Mali and Tanzania. Groups lowered barriers to marketing, provided access to more distant markets, and enabled women to access agricultural credit. The study suggests that while formal groups help members engage more effectively with markets, informal groups help women develop leadership skills, build savings and ease their participation in formal groups. Similarly, participation in women-only groups helps facilitate participation in mixed female and male groups, where access to resources and therefore economic benefits of membership are greater than in women-only groups (Oxfam, 2013).

In the supply chain, groups can help overcome the constraints that individual women farmers may face to meet large orders or to purchase the required inputs. Groups can increase smallholder growers' competition and their leverage in markets; they can also increase incentives for buyers and producers to engage in a market relationship (FAO, 2011; WDR, 2008).

On the negative side, groups demand time and cash for transactional costs, and women farmers are usually short on both time and cash. In addition, there can be elite capture—from better-off or more influential females in female-only groups and from males in mixed groups. It is safe to assume that the more disadvantaged the woman farmer is, the more she will benefit from group participation but the greater her costs of participating.

The advantages of groups or collectives in the supply chain should extend beyond farming to cover individual women producers both on and off the farm, as Box 11 suggests.

Lesson 10: *Successful projects in agriculture with small-scale women farmers or agricultural processors provide an integrated suite of services, targeting both production and marketing and tailoring services to address social constraints.*

The commissioned study by Doss et al. filled gaps in the available evaluation evidence by mapping current good practice with women in agriculture. The 34 good practice projects identified provide a suite of services to increase women's productivity in agriculture and a viable link with agricultural markets (for both accessing or purchasing inputs and selling outputs). This suite of services includes farmer groups to enhance access to markets, financial services (e.g., access to loans and savings, Box 10), harvesting processing and storage technologies, and accessible training. These successful projects adapted services to local conditions and women's social, time and cash constraints. They took advantage of local structures and organizations to implement projects in a sustainable fashion and, importantly, targeted women as members of households and communities and involved male partners and community leaders.

For instance, Sunhara Walmart, a two-year program the Walmart Foundation funded and Agribusiness Systems International implemented in Uttar Pradesh, India, has as much as quadrupled the income of about 1,500 women smallholders (to \$4 a day) by linking vegetable and dairy farmer producer groups to large national buyers, setting up savings and credit schemes, providing extension services, forming a producer federation and sensitizing the community on the importance of women as economic actors.⁶²

A telling example of tailoring an intervention to social constraints is the CARE dairy project that works with 35,000 smallholder farmers in northwest Bangladesh. The project created dairy farmer associations and

59 See Menon & Rodgers in this report.

60 See Quisumbing et al. and Doss et al. in this report.

61 See Quisumbing et al. in this report.

62 See Doss et al. in this report.

provided training in farm management, dairying and improved breeding for the project's producers, 79 percent of which are women. The project accounted for the seclusion of females in the region by having milk collectors come door-to-door to collect milk and establishing milk collection centers in the village. Fixed milk collection facilities (including testing for quality) more conveniently located in the village benefit all dairy producers, not only women, because they reduce transaction and transport costs and ensure the quality of milk.⁶³ This example shows that carefully designed policies and projects can work within existing cultural norms, although they may not be able to overcome all social constraints (FAO, 2011).

The integrated suite of services directed to subsistence women farmers is bound to be more costly than the provision of single agricultural services to better-off women farmers, but may have large social benefits that must be taken into account. Social benefits include increased food production, leading to improved child nutrition and lower household vulnerability to food scarcity.

On the provision of single services to better-off women farmers, the available evidence again focuses on questions of appropriate and effective design features.

BOX 10: FINANCIAL SERVICES FOR WOMEN IN AGRICULTURE

The introduction of microloans and microsavings is crucial for the long-term success of women in agriculture. The form of such microfinance institutions varies depending on the goals of the project, with formal and informal methods each having their advantages and disadvantages. Common lessons can be derived from current good practice. First, loans are most effective with encouraged savings programs, especially for women who do not have assets to use as collateral for formal loans. Second, it is important to encourage transparency about loans within the family, with the goal of empowering women to use the money loaned in the way they have planned, especially if a project is working with households as a unit or with farms as a family business. Third, agricultural loans often do not follow the same rules as small business loans since they are dependent on weather, seasons, and uneven cash flow. Adapting loans to work with local conditions and local preferences can improve repayment rates, making both the lending institutions and the participants more successful. Fourth, loans work better when coupled with financial literacy and business education, as well as trainings on how to use new inputs or technologies in which women can invest (Doss et al. in this report).

An important question for further research is how cost-effective and sustainable the provision of this integrated suite of services can be, and whether there is a combination of services that is more cost-effective and easier to implement than another.

Lesson 11: *Given the commonalities between women farmers and entrepreneurs, it stands to reason that female subsistence farmers will require an integrated suite of services to grow cash crops, while single services (improved modern farm inputs, knowledge and extension, financial services) may be enough to grow the farm productivity of women with larger farms, more assets, and/or more independent control over farm assets.*

Illustrating this lesson, Josephine Okot, mentioned at the start of this section on farming, provided women subsistence farmers with credit, skills and agricultural extension so they could move into commercial farming. For Josephine herself, however, a single service—a loan guarantee—addressed the major constraint she faced.

At issue is the question of which vehicles are appropriate for distributing modern inputs and encouraging female farmers to adopt them in a cost-effective and sustainable fashion. Options include free distribution combined with extension visits, subsidies (to prices or credit), and savings with advance purchase schemes. However, as Knowles points out, there is little information on their impact on farm income and on the cost-effectiveness and sustainability of different schemes.⁶⁴

Second, there have been numerous instances recorded in the literature where providing inputs to men increased women's labor in family plots, but not their incomes, because men retained the farm proceeds. Inputs need to reach women farmers, accommodate their time constraints, and be affordable. Based on the case study of successful projects, Doss et al. suggest providing inputs to women farmers conditional on attending training sessions; enabling farmers to purchase agricultural inputs, such as fertilizer, in advance of use; and ensuring the availability of inputs through

63 See Quisumbing et al. in this report.

64 See Knowles in this report.

local organizations and distribution points.⁶⁵ The same can be said regarding agricultural knowledge, extension and financial services.

Lastly, cleverly designed farm services, which protect privacy and help overcome social constraints that women farmers face in more socially conservative rural societies, should reach more of them.

COMMON LESSONS FOR RURAL ENTREPRENEURS AND FARMERS

Lesson 12: *Rural electrification is a proven intervention for increasing rural women's productivity and earnings in agriculture and entrepreneurship. Access can be increased by providing targeted loans or subsidies to female-headed households to connect to existing electricity grids.*

Access to electricity can increase women's productivity indirectly by increasing the length of the work day, reducing time required for housework and fuel collection, and providing new business opportunities with appliances that require electricity to operate, such as sewing machines, refrigerators, computers or cash machines. The availability of electricity is normally provided to communities by extending the grid or to households through subsidies, not to women directly, although targeted subsidies can be provided to poor female-headed households to reduce connection charges to existing grids.⁶⁶

Recent credible evidence that controls for placement bias (given that infrastructure investments are normally allocated geographically on the basis of economic, social or political considerations rather than randomly) shows that rural electrification raises female employment in both South Africa and India. In South Africa, it did so by a significant 9.5 percentage points within five years, which meant 15,000 more women participated in the labor force, compared to an insignificant 3.5 percentage point increase in male employment. By allowing the household to switch to electric cooking and lighting, women were able to spend less time collecting wood fuels, and more time working in home-based microenterprises. Women headed more than half of the households in the sample of 1,816 poor rural communities studied (Dinkelman, 2011).

In India, a rural electrification program that increased coverage from 74 percent of rural households with electricity in 2005 to 91 percent in 2011 increased hours in employment by more than 17 percent for women and only 1.5 percent for men. Per capita household income and food expenditures increased

significantly with access to electricity, and the poverty incidence decreased significantly (Khandker et al., 2012). Electricity extended the hours of operation of household businesses.

Interestingly, a credible study of access to water infrastructure, which used nationally representative data for rural areas in nine developing countries and controlled for many factors, including placement bias, found that improved water access reduced women's unpaid work in subsistence agriculture but, unlike rural electrification, was not associated with an increase in paid work. Time women spent collecting water turned out not to be the binding constraint for accessing paid work outside of subsistence farming (Koolwal & van de Walle, 2011). This finding suggests that the positive employment effect of access to electricity is primarily because it enables the functioning of home enterprises rather than because it frees women's time from housework.

The available evidence further suggests that targeted subsidies to unconnected households in areas with grid coverage is more cost-beneficial than grid extension interventions, especially in sparsely-populated areas, and that rural electrification is less effective in terms of promoting women's employment in very poor rural areas where they may have limited opportunities to start businesses or market agricultural products.⁶⁷

Lesson 13: *Mobile phones are a useful tool to provide market information to women rural producers, with the potential to increase their productivity and earnings by reducing transaction costs (including travel time) and price variability.**

The effectiveness of mobile phones in facilitating access to market information in agriculture and fisheries, leading to less variability in local market prices and consequent welfare gains, has been well-documented. In India, for instance, the introduction of mobile phone coverage helped overcome price variation in fish markets—from 60 to 70 percent to 15 percent across markets—and eliminated waste, either from fish that did not sell or buyers that incurred transportation costs and could not buy. Fish sellers and consumers using mobile phones had revenue gains that were approximately twice as much as those of non-mobile users (Jensen, 2007).

A study in Niger similarly found that mobile phone coverage reduced price variability between 10 and 16 percent in agricultural grain markets, especially in dispersed markets with poor road connections (Aker & Mbiti, 2010).

65 See Doss et al. in this report.

66 See Knowles in this report.

67 See Knowles in this report.

* Drawn from a literature review of impact evaluations of mobile phone interventions commissioned for this project, by Megan Zella Rounseville.

These two studies assessed profits primarily for male fish sellers and grain traders, but the mechanisms identified are transferable to female producers or vendors, since high transportation costs, dispersed markets and imperfect information about prices, supply and demand for the product being sold are market barriers that are equally or more present for women, especially when they face mobility constraints. The positive impacts of mobile phones also clearly benefit female consumers through lower prices, and, if accompanied by mobile money or other savings interventions, could translate into higher savings levels as a result of reduced prices of consumer goods.

Lesson 14: *Female autonomy is an important determinant of productivity and earnings of rural women producers. Women's level of autonomy influences the success of interventions targeting women farmers and rural entrepreneurs.*

The evidence suggests that interventions seeking to increase the productivity and earnings of rural women producers are more successful when women have economic independence or autonomy and fewer social restrictions. Female autonomy means that women have physical mobility and can make independent choices—both requirements to succeed in business. Autonomy is either measured directly, or it is indicated by the fact that women are unmarried, divorced or widowed heads of household, or sole income-earners and, therefore, do not have a male partner who can control their choices. Female headship and female autonomy allow women to seek and benefit from productive services and resources directly, increasing the likelihood that they will be able to switch from low- to high-value production.⁶⁸

Thirty-eight percent of the very poor women who transformed their occupations and sharply increased their earnings as a result of a significant infusion of capital and training in Bangladesh, already mentioned in the entrepreneurship section, were sole income-earners.⁶⁹ Among the poor rural households in South Africa where electrification resulted in increased female employment, more than half were headed by women (Dinkelman, 2011).

Female heads of household, with greater autonomy, seemed to benefit more from dairy value chain interventions in Mozambique. Female heads own the cows

and keep the proceeds from the sale of animals, whereas wives most often milk the cows but do not control the proceeds of dairy production.⁷⁰ Female headship is a consistent trait that emerges in those women who have successfully crossed over from lower-value to high-value production, as supported by the evidence presented here on female farmers in Malawi.⁷¹

An alternative explanation of the above evidence is that rural women do not necessarily lack autonomy, but that they access fewer productive services because their provision has traditionally been biased toward men clients, especially when there is an adult male present in the household.

The importance of female autonomy should also extend to self-employed women in urban areas, as the study for female “crossover” entrepreneurs in Uganda suggests (Campos et al., 2010). Autonomy or its absence seems to be much less of a concern for women in wage employment, however, and this may be partly because women have higher status and are more independent in countries where the wage sector is more prominent and employs more women. But it may also be that wage employment in itself provides women with a measure of autonomy from the family, at least within the confines of the workplace.

68 The feature most strongly associated with women cash crop producers in the Malawi study (Dimova & Gang in this report) is the existence of village development agencies, including credit and loan cooperatives and women's collectives, suggesting that these women's cash crop activities benefited from access to these village services.

69 See Bandiera et al. in this report.

70 See Quisumbing et al. in this report.

71 See Dimova & Gang in this report.

BOX 11: WOMEN'S COOPERATIVES AND ACCESS TO MARKETS

A critical factor for the success of women-owned businesses and enterprises is being connected to the market. In August 2010, WEConnect International helped to launch a landmark pilot that brought together the World Bank, Accenture and the International Trade Centre in support of the Self-Employed Women's Association (SEWA) Gitanjali Cooperative. SEWA was founded in 1972 in Gujarat, India, as a trade association of informal women workers with more than 1.3 million members across India. WEConnect International helped strengthen the business of SEWA Gitanjali's workers making paper stationery products by building production capacity and establishing market linkages.

Each partner provided the cooperative with expertise. WEConnect International and Accenture worked with the SEWA Gitanjali cooperative to select the stationery products. Accenture introduced its suppliers, Staples and Giftlinks (a women-owned and women-controlled business), to the cooperative. The International Trade Centre sent a paper expert to work with the women to help ensure they understood the importance of international quality standards and how to meet them. The World Bank provided the seed funding.

Some of the outcomes of this collaboration included:

1. Implementation of an assembly-line process to improve productivity from 200 to 400 percent;
2. Reduced costs and higher quality recycled paper and other key products and services needed for the production process;
3. Reduced waste through equipment upgrades;
4. Mapping SEWA members' skills to production roles;
5. Training SEWA members with easy-to-follow pictorial and documented guidelines; and
6. Increased exposure to go-to-market channels, in particular Giftlinks, which placed a standing monthly order, and Bharti Walmart, which is considering an order for many of their stores in India.

Most importantly, the above achievements have enabled the projected daily earnings of SEWA Gitanjali members to increase. "This pilot came at that critical juncture when the waste pickers were desperately seeking a solution for their livelihood. Accenture and WEConnect International brought resources to help the cooperative help themselves to be totally self-reliant in the longer run ... This is a true example of the role of the private sector partnering across the other sectors to fight poverty through trade," said Reema Nanavaty, Chair, SEWA Trade Facilitation Centre.

Some of the waste pickers engaged in the recycled paper products production, when interviewed by WEConnect International and Accenture, said, "We are able to give our children an education through our earnings. Initially we were satisfied to educate our children up to the tenth grade in school. Now we want our children to go to college, and we know we can do this."

Summarized from the book, Buying for Impact, Elizabeth A. Vazquez and Andrew J. Sherman.



A trade agreement between the United States and Cambodia (1999) was the first to use increased access to the U.S. market as an incentive for Cambodian textile firms to improve working conditions. Cambodia's textile workforce is 90 percent female. The International Labor Organization's (ILO) Better Factories Cambodia program monitored these improvements through third-party monitors. Compliance with occupational safety and health improved 20 percent, and accurate payment of wages, overtime, and benefits increased by 37 percent. The Cambodian garment industry continued to conduct monitoring, and factories continued to comply with labor standards even after the agreement with its quota advantages for Cambodian textiles in the U.S. market ended.⁷³ Building on the success of Better Factories Cambodia, the ILO and the International Finance Corporation (IFC) currently operate the Better Work program in a number of countries in collaboration with government and industry.

GENDER GAPS

Working for an employer for a regular monthly, bi-weekly or weekly paycheck and, if one is fortunate, employment benefits, is what most people associate with a job, what the majority of working women in industrial, middle, and high-income economies do, and towards what many women working for pay or looking for work in low-income countries aspire.

Women are under-represented in wage and salaried employment in low- and lower-middle income countries, while reasonably paid wage labor outside the home often empowers women and may be a preferred option for very poor women who often lack the basic assets needed to succeed in self-employment (Bee-gle et al., 2011; Kabeer, 2012). The key, however, is expanded access to decent, non-exploitative jobs that are fairly remunerated. This is easier said than done. Occupational sex segregation and gender discrimination in the labor market, evident in both developing and industrial labor markets, mean that women tend to be in lower-paid occupations; additionally, they are paid less than men within the same occupational category (WDR, 2012).

SOLUTIONS: WHAT WORKS FOR WAGE EMPLOYEES?

There are a number of policy initiatives that governments can undertake to increase the availability and quality of wage work for women. We acknowledge their importance but restrict our coverage to programs that can be put in place by private sector agencies or by private and public sector collaboration.

Well-known program interventions to increase female labor force participation rates include job search assistance, skills training, internships with firms and wage subsidies (including job vouchers). These interventions seek to increase the productivity of the worker, her work experience, the match between worker and firm, or the incentive to hire a worker the firm would have otherwise not hired (such as a female or young

worker). Many of the programs that have been evaluated have been put in place by governments to cope with high unemployment rates in times of economic crises or transitions (these are called active labor market programs).

Alternatively, child care programs have been implemented specifically to increase the supply of female workers in the economy on the assumption that a lack of affordable child care has been a main factor limiting this supply. More recently, researchers have begun to study the need for and impact of elder care on female labor force participation rates.

Active labor market programs and child care have been designed mainly to increase women's participation in labor market. Another set of interventions seeks to improve the productivity of women already in the workforce. Credible evaluations of the impact of skills training programs on the productivity of women already employed in a firm were not found, but we can assume that quality training programs implemented by large firms should be effective, especially when they train women employees in non-traditional female occupational skills (thus addressing occupational segregation by sex). A number of new private and public sector collaborations (mostly in Latin America) certify firms for good practices in hiring and retaining female employees. Unfortunately, there is no reliable evaluation data yet on the impact of these certification programs. Both non-traditional skills training and certification programs are listed in the Roadmap as high potential interventions for women in wage employment with no rigorous evaluation data as of now.

LESSONS FOR WAGE EMPLOYEES

Lesson 15: *Skills, on-the-job training and wage subsidies introduced to cope with economic shocks and high unemployment rates, or to help workers transition from centralized to market economies, increase employment rates for adult women, sometimes more*

⁷² This section on wage employment draws on the commissioned study by Todd.

⁷³ WDR, 2013 – Robertson et al. 2009; Adler and Hwang 2012

so than for adult men. However, they have less robust effects on raising their wages, casting doubt on their generalized effectiveness as an economic empowerment measure.

Evaluations of large-scale government programs in Latin America, three in Argentina and one in Mexico, which provided employment vouchers or wage subsidies (around \$100-\$150 per month) and/or skills training to the unemployed poor in times of economic hardship, find high uptake by females and positive impacts on their employment, but less clear effects on wages.

Evaluations of retraining and wage subsidy interventions in four transition economies (Poland, Romania, Russia and Slovakia) yield mixed effects: positive effects for women's employment probabilities in Poland and Romania, no effects in Russia and mixed effects in Slovakia. Again, there is less support for the effect of these programs on wages.

Finally, a retraining program in China also has mixed findings: a negative impact on employment probability in one city and a positive impact in another city, with no differences between the sexes and no discernible effects on earnings in either location. The program was better implemented in this second city, which may explain the observed city difference in employment outcomes.⁷⁴

Todd also argues that the pattern of higher employment without higher wages in some of these programs could be because they helped workers find jobs more quickly, but at the expense of lower wages than workers may have obtained from a longer job search on their own. This study, and a similar review by Betcherman, Olivas and Dar (2004), conclude that these large government programs tend to increase employment but not wages and raise the issue of possible negative "spillover" effects on the jobs and wages of people not participating as well as the possibility that publicly provided training could crowd out training provided by private sector firms.

Lesson 16: *Access to child care is proven to increase women's (including young women) wage employment and earnings, but child care interventions must be designed to ensure quality, affordability and cost-effectiveness.*

To facilitate women's wage employment, programs can provide better access to affordable and reliable child

care, public provision of child care or child care subsidies.

Evaluations of community day care programs in Guatemala City and rural Colombia and of a pre-primary school-building program for middle-income urban families in Argentina find increases in the probability of female employment as a result of increased availability of child care, along with positive effects on the nutrition and development of young children participating, suggesting high benefit-cost ratios (Ruel et al., 2006; Attanasio & Vera-Hernandez, 2004; Berlinski & Galiani, 2007). Similarly, free preschool provision increased the employment of Israeli Arab women with traditionally very low workforce participation rates (Schlosser, 2011).

However, the evaluation of a large, publicly provided day care program for low-income mothers in Rio de Janeiro, Brazil, finds that the program increased mothers' employment, but that the increase in income was less than the cost of child care, calling into question the cost-effectiveness of the program. There was also evidence that the public provision of daycare crowded out private provision, suggesting that it may be more cost-effective to subsidize private child care than to finance public provision (Barros et al., 2011).

Studies in Romania and Russia, which have seen the cost of child care rise significantly with the transition to a market economy, show that child care subsidies were more effective than wage subsidies or family income subsidies in increasing maternal employment, both in terms of number of women working and hours spent at work (Lokshin, 2004; Fong & Lokshin, 2000).

The weight of the evidence shows that accessible and affordable child care increases female employment in formalizing economies with growing formal sector employment. Unanswered questions include the design of cost-effective, affordable and quality interventions in different settings, the role of child care subsidies and the effects of different child care models on quality and outcomes for children.⁷⁵

Todd reviews the available evidence on elder care and concludes that more research is needed on the decisions that women make about child care and elder care to understand how these factors jointly influence women's participation in the workforce. At this stage, there is not enough evidence to support elder care programs as a way of increasing female employment and earnings.⁷⁶

74 See Todd in this report.

75 See Todd in this report.

76 See Todd in this report.



Kuo Dolo was among the first graduates of the Economic Empowerment of Adolescent Girls and Young Women (EPAG) project in Liberia, implemented by the Ministry of Gender and Development. The program partnered with the private sector to provide Kuo and her peers with skills training that would respond to labor market demands and offered job placements and internships to help young graduates make the transition to the workforce. EPAG provided nearly 2,500 young women with six months of classroom training (on either job skills or business development skills), followed by six months of placement and support, plus a stipend for transport and child care contingent on attendance and assistance with opening savings accounts.

Dolo, who after graduation was employed by the Corina Hotel as a receptionist, told the audience at her graduation ceremony that she plans to “work hard, save money and eventually return to school,” adding that someday she would be a “civil engineer, helping in the construction of roads and bridges, especially in the rural areas.”⁷⁸

GENDER GAPS

For most of the developing world, growing levels of female school attendance, combined with low labor force participation, suggest that young women have a more difficult transition from school to work than young men. Another manifestation of this more difficult transition for young women is the “idle girls” phenomenon. In 2011, anywhere between 47 percent and 72 percent of girls aged 15 to 24 in low-income developing countries were neither at school nor at work, recorded as “idle” in household surveys.⁷⁹

These initial disadvantages call for greater policy and program efforts focused on young women’s transition into jobs to equalize opportunities with young men. The development payoffs can be large; benefits can extend to other areas of young women’s lives and to their current or future children. Investing in young women can effectively stop the disadvantage that is often transmitted from young mothers living in poverty to their children. Increased awareness of these benefits has led to a range of interventions in developing countries directly targeted to this age group, and a growing number of impact evaluations. Evaluations targeting young women are concentrated in the areas of wage employment and entrepreneurship; some have shown proven or promising economic outcomes, including increases in earnings and business incomes.⁸⁰

SOLUTIONS: WHAT WORKS FOR YOUNG WOMEN WORKERS?

Lesson 17: *For young women, demand-oriented skills, on-the-job training, vouchers and/or wage subsidies are effective in increasing their employability and earnings, if social restrictions that prevent firms from hiring young female workers are not binding. These interventions can be expensive but are still cost-beneficial in monetary terms. Some components, such as providing job information through targeted campaigns or mobile phones, implemented on their own could be effective at much lower costs.*

A generation of youth labor training programs in Latin America providing classroom training, internships and stipends has documented success in promoting young women’s employment. They promote women’s equal access, especially to training in non-traditional skills, and provide stipends for child care. Young women have flocked to these programs and have generally outperformed young men in obtaining results.

In Peru, young women trained in traditionally male occupations generated almost 100 percent more labor income than controls after 18 months, compared to an increase of only 11 percent for young men (Ñopo et al., 2007). In Colombia, young women with three months of classroom training and three months of on-the-job training (plus a stipend for child care) earned on average

77 This section on youth employment draws on the commissioned study by Katz.

78 The Inquirer, Monrovia, Liberia, Monday December 13, 2010, Page 13

79 Presentation by M. Buvinić “Adolescent Girls Initiative” World Bank, 11/30/2011.

80 We have not included in this list conditional cash transfer (CCT) programs that target mothers (rather than the adolescent girls themselves) in poor households with cash benefits conditional on children attending school or getting health checks. Rigorous evaluations of these programs show proven effects in increasing girls’ schooling outcomes, with lagged positive impacts on their adult productivity and earnings. See Knowles (this report) for more details.

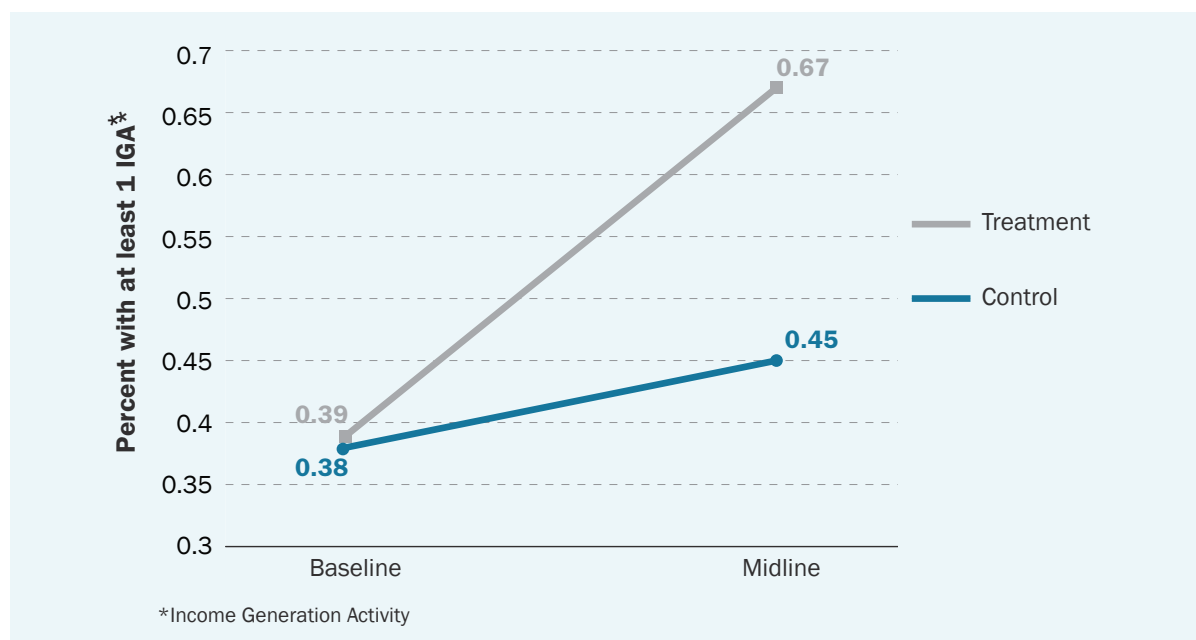
18 percent more than controls; young men earned on average eight percent more (Attanasio et al., 2011). In Argentina, job vouchers resulted in a six percentage point increase in young women's wage employment eighteen months later, although mostly in the informal sector jobs (Galasso & Ravallion, 2004). The exception is a youth employment program in the Dominican Republic, which had a stronger impact on young men's employment in formal sector jobs when compared to young women, but did reduce teen pregnancies among female trainees and increased their social and personal competencies (Ibarrarán et al., 2012).

These programs are targeted to disadvantaged youth and linked with private sector labor demand. Their overall success is related to the soft skills training they offer, in addition to technical skills, the quality of the on-the-job training, and the commitment of firms to hire trainees. "Soft skills" are personality traits, motivations and preferences that are valued in the labor market, and recent evidence shows that they matter and should have an important place as part of job training programs. The comparatively greater success of these programs with young women versus young men could be because of systematic gender differences in performance that favor female trainees, or because of firms' preference to hire female over male workers, or both.⁸¹

They have also benefited from the existence of a comparatively large, established private sector willing or even preferring to hire young female over male graduates, apart from one exception shown in the results of a pilot program in Jordan, which provided soft skills training and employment vouchers to young women university graduates. The combination of voucher and training yielded a 40 percent increase in employment in typically female occupations in the short-term, but the effect disappeared in a follow-up measure 14 months later when the vouchers had expired⁸² (Groh et al., 2012). In this case, the program was not able to overcome social constraints that prevent firms from hiring young Jordanian women.⁸³

A preliminary evaluation conducted six months after Kuo and her cohorts graduated from the Liberia EPAG program found that employment was 50 percent greater and incomes were 115 percent higher among trainees, compared to those in the control group (Figure 3).⁸⁴ Two years later, 2,408 young women—or 97 percent of those who joined in two different batches—had graduated from the program. Preliminary findings show that the positive effects of EPAG on employment and earnings have persisted in the second batch of trainees.⁸⁵

FIGURE 3: LIKELIHOOD OF WORKING (FROM KATZ ET AL., ROADMAP REPORT)



81 See Katz in this report.

82 The soft skills training component, however, led to a sustained improvement in life outlook and reduced depression in young women (Groh et al. 2012).

83 See Katz in this report.

84 At the start of the training, 35 percent of the trainees were married or cohabiting with a partner, 70 percent were mothers and 77 percent had been displaced during the fourteen year long civil war (Lundberg 2011).

85 Shubha Chakravarty, p.c. 2/4/2013

Although program costs are relatively high (\$1,200-\$1,700 per trainee), preliminary cost-benefit analysis suggests that the gains in earnings (\$30-\$75 monthly) can cover costs in two years for business skills and eight years for job skills (World Bank, 2012).

The short-term gains of EPAG in increasing employment and earnings have been particularly large for young women receiving business skills training, which reinforces the importance of incorporating entrepreneurial skills in post-conflict contexts, like Liberia, where the private sector is nascent and wage employment is limited.

To summarize, elements of success in these demand-driven job programs include the following: explicit ties to private sector firms (for identifying training that responds to market demands, providing internships and job placements); soft skills and technical or business development training for young women trainees; job internships; and vouchers or stipends. It is unclear from the existing evidence if one of these elements is more essential than others, so that a similarly effective pared-down program with fewer elements could be implemented at a lower cost.

There is some evidence that information about job opportunities to disadvantaged youth may on its own help young women access the labor market, as it did for young women in the call center industry in India, cited in Box 1. Additionally, access to mobile phones promises to expand the employment impact of job information alone significantly, at low cost.

Lesson 18: *Cash grants or incentives to young women to access education increase their school attendance and may improve their schooling outcomes; cash grants with no conditions may help increase young women's employment and income (if they are large enough) and have sizeable social benefits.*

A systematic review of the evidence for programs for young women in developing countries finds that six educational incentive programs in which cash transfers were made to individual young women improved their school attendance rates. Information about improvements in school performance, however, was not available. The evidence additionally suggested that gains may be greater for those who are poorer and live in rural areas (Dickson & Bangpan, 2012). A cash transfer experiment in low-income Malawi, however, found significant impacts on school test scores, as well as enrollment and attendance, when the transfer (of about \$5 monthly) was conditional on the young women (aged 13 to 22) attending school (Baird et al., 2011).

In the Malawi experiment cited above, a similar transfer with no ties or conditions did not improve schooling outcomes but, by providing a temporary source of independent income, allowed girls who dropped out of school to postpone becoming economically dependent wives and mothers: teen pregnancy and marriage rates fell significantly in the treated group (Baird et al., 2011). Further, providing either tied or untied cash transfers decreased the prevalence of HIV and HSV-2 (genital herpes) infections in young women, measured 18 months after the cash was first given. Young women who received the cash reduced their interactions with older men, who are more likely than younger men to carry these infections (Baird et al., 2012).

A program in Uganda that offered young adults (aged 16 to 35) organized in groups sizeable cash grants (of about 20 times more than monthly earnings on a per-person basis) for training and business materials, but did not monitor the use of the funds, found significant increases in employment and incomes for male and female grant recipients, which persisted two years after the grants were disbursed. Grant recipients had 50 percent higher income, when compared to controls. Returns on investment were about 35 percent per year (Blattman et al., 2011).

The social benefits of these cash grant programs, in addition to the educational and economic benefits, make them a highly attractive, promising intervention with potentially high benefit-cost ratios, especially when the benefits last.

A key question regarding these programs that needs to be addressed is how generalizable the findings are from one setting to another, for instance, urban slums in middle-income countries rather than rural areas in low-income countries.

Lesson 19: *Livelihood programs that combine reproductive health with income generation and asset building show promising results for young women in low-income settings and in socially conservative environments, but need to be further evaluated before they can be delivered at scale.*

Livelihood programs, which were first focused on providing young women with access to reproductive health knowledge, have increasingly incorporated asset-building programs, including improving young women's access to loans, savings and markets. Recent evaluations of BRAC adolescent programs in Bangladesh, South Africa and Uganda find positive outcomes, including increases in earnings and savings. After two years, the Uganda program, with a more rigorous de-

sign than the others, finds a 35 percent increase in the likelihood of young women being engaged in income generation and a 30 percent reduction in pregnancy rates, underscoring the strong connection that appears to exist between economic and health indicators for young women (Bandiera et al., 2010).⁸⁶

The *Ishraq* program seeks to create educational, health, and social opportunities for vulnerable girls in rural Upper Egypt, through bringing parents, brothers and community leaders together to help overcome young women's social and mobility constraints. An evaluation found that 68 percent of the girls who com-

pleted the full program had entered middle school by the end of the program, compared to none of the girls in the control villages (Brady et al., 2007).⁸⁷

A systematic review of adolescent girls programming identifies three livelihood interventions and similarly concludes that the data suggests that these programs may improve young women's economic and reproductive health outcomes, although their long-term impact is not known (Dickson & Bangpan, 2012). Data about costs is largely missing in these evaluations, which means that less is known about the cost-effectiveness of these programs.

CONCLUSIONS

The review of the empirical evidence across the four employment categories and countries has identified nine proven and nine promising interventions to increase women's productivity and earnings in developing countries, providing program funders and implementers with options in terms of what to do and solid guidance regarding what works best, for whom and where.

PRIORITY INTERVENTIONS

Of the *proven* (or being proven) interventions in the Roadmap, many are simple and therefore easy to implement, and should benefit large numbers of women. Some can be scaled with what we know already; others need adaptation to particular environments before scaling up. All are worthy investments. They include designing and marketing savings vehicles for all women, poor and non-poor, in different sectors and occupations; credit and business management training targeted to women-owned SMEs; bundled services, including capital, income generation training and follow-up technical visits, for women-owned micro firms operating at subsistence level; land registration and land titling programs to include women farmers as individual owners and co-owners with men; quality, accessible and affordable child care for women wage workers; and loans and subsidies to connect poor households, including female-headed households, to electricity grids in rural areas.

Interventions proven to increase young women's economic opportunities are especially attractive, given their large potential benefits for those just entering the labor market, and include demand-driven job services and conditional cash transfers.

The nine *promising* interventions listed in the Roadmap must be further tested and refined but are equally attractive for program funders and implementers, on their own or in collaboration with governments. They include mobile phones (for financial transactions and market information) for all women; consulting services

or customized technical advice for entrepreneurs and microentrepreneurs; and capital in-kind (as inventory, for instance) for microentrepreneurs. Promising interventions for women farmers include information on land rights and farmer associations for all farmers; a suite of services for subsistence-level farmers; and single services (i.e., modern agricultural inputs and knowledge) for smallholder commercial farmers. Promising interventions for young women are livelihood programs and unconditional cash transfers.

A large potential female clientele in developing countries is ready to use and benefit from the services these interventions provide, if they are well-designed and targeted.

THE VERY POOR NEED MORE

It is clear from the evidence that *for whom* (the client) matters when assessing what works to promote women's economic empowerment. Few interventions exist that work for all women, across all socioeconomic groups and other varying conditions. They include savings and mobile phones for all; land titling, land rights information, and farmer associations for women farmers; and quality, accessible and affordable child care for women wage workers.

The more rigorous evidence, which better describes the characteristics of beneficiaries, often shows the same class of interventions having significantly different outcomes depending on the client or beneficiary. This is the case with credit, which works for the non-poor but not for the very poor, if delivered as a stand-

⁸⁶ See Katz in this report.

⁸⁷ See Katz in this report.

alone intervention; the same is the case with business management training.

Further, the evidence consistently indicates that very poor women need a more intensive package of services than less poor women to break out of subsistence production—on and off the farm, in agriculture and entrepreneurship—and reap the benefits of higher productivity and earnings for themselves and their families. These interventions are expensive but can be cost-effective.

To move into profitable work, very poor women subsistence producers and entrepreneurs require a large enough capital transfer, paired with business training and follow-up technical visits. Similarly, poor, female subsistence-level farmers need an integrated suite of services, which targets both production and marketing and involves male partners and community leaders, to switch to high-value crops.

There are no silver bullets to grow the productivity of subsistence producers. This is particularly challenging because the delivery of bundled services is more expensive and requires more implementation capacity, and the very poor often reside in communities with few resources, frail institutions and weak delivery systems.

CLEVER DESIGN ADJUSTMENTS

The review of the empirical evidence has nevertheless identified a key strategy—the breakthrough discovery of simple, clever design features that help women overcome family and social pressures, as well as the mobility constraints that impede women from growing their earnings in poorer and/or more socially conservative settings. A telling example is to provide capital in-kind (e.g., by purchasing inventory or a physical asset) rather than in cash to nudge women to keep the money in the business rather than divert it for household use or pass it on to relatives.

Many of these design features give women a measure of autonomy in an otherwise restricted environment where they are not free to make work-related choices or travel alone. Perhaps most notable among them is the use of mobile money services to conduct financial transactions in private, receive reminders to save and obtain information on prices and jobs in real time without having to travel long distances. There are also other simple design adaptations that are neither expensive nor difficult to implement, such as the example of modifying milk collection routines to accommodate women's mobility constraints in societies that practice female seclusion.⁸⁸

Women's low uptake and high attrition rates in many of the training programs reviewed here are signs that these programs are not designed with women clients' constraints in mind. Minor design adjustments, in class schedules and locations, for instance, could go a long way in increasing uptake, retention and training effectiveness. More generally, minor adjustments to the design of a range of services reviewed in this report to better accommodate the needs and demands of women clients could improve performance and outcomes considerably.

LOOKING AHEAD

ADDRESSING KNOWLEDGE GAPS

As this overview has shown, there is a growing body of rigorous evidence for what works to empower women economically, but there is very little evidence on financial and economic costs and benefits and even less evidence on the sustainability of interventions, both in terms of programs' lasting impacts and the institutional and political dimensions of sustainability (see Box 2 under Research Framework). The gaps in knowledge are large and cut across the different intervention categories. Overcoming this hurdle and advancing knowledge meaningfully will require building the evidence base systematically and ensuring it is guided by program priorities.

This is not, however, how most available evidence to date has been generated. Many of the rigorous impact evaluation studies have been opportunistic, emerging in the context of particular project openings and funding priorities. A systematic approach would expand the numbers and geographical scope of credible evaluations, and cover regional and content gaps. For instance, while it is understandable that much of the research on women farmers takes place in the still predominantly agrarian Sub-Saharan African economies and most childcare program evaluations are conducted in large urban centers in Latin America, there is much to gain from diversifying the study of interventions across different regions and settings.

A salient content gap is the lack of credible impact evaluations of agricultural projects and interventions disaggregated by sex or focusing on women farmers. There is a marked contrast between this lack of solid knowledge on what works for women farmers and the rich evidence that documents gender inequalities in agricultural production and the factors explaining these inequalities.

⁸⁸ See Quisumbing et al. in this report.

IDENTIFYING THOSE MOST LIKELY TO SUCCEED

There is very little knowledge on the characteristics and determinants of success of working women—successful entrepreneurs and farmers who have “crossed over” to high-value production; young women who have successfully transitioned from school to good jobs in the labor market; and wage workers who have moved up to higher-paid jobs in factories or firms or into non-traditional female occupations. This gap in knowledge is not surprising because there are comparatively so few women to study, but a systematic study of trajectories of success among working women across sectors should yield valuable information for program and policy design.

Results of this research could be useful to help identify the profiles of those women entrepreneurs, farmers or wage workers with firms or farms most primed for growth or most ready to succeed in non-traditional occupations. The ability of programs to recruit and select those women and young women most ready to succeed in the sector would significantly increase their effectiveness.

More generally, many programs could do a much better job understanding and incorporating women’s preferences and the constraints they face in the design of interventions, most of the time by making fairly simple adjustments. For instance, microfinance could offer more individual loans to women microentrepreneurs who dislike group-based lending because of the time demands of group meetings, while business training programs could offer evening schedules to accommodate women business owners’ time constraints.

“Big data,” which describes the growing availability and use of very large data sets that are continuously generated and digitally captured through mobile phones and the Internet, potentially provide a vast source of information to better understand women’s preferences, the constraints under which they operate, and the opportunities they see ahead. Big data could provide a trove of valuable information to better design and tailor programs in response to women’s needs. Big data could also be useful to monitor and assess the impact of programs by tracking women clients’ views and responses to the services provided in real time.

HIGH POTENTIAL INTERVENTIONS

This review of the evidence has been limited, by definition, to that which has been evaluated and published. Evaluations that yield no significant findings are seldom published, so this review contains less than it should on lessons from failed programs. More importantly, it does not cover many interventions and most innovations for which there is no good evaluation data. We attempted to overcome this limitation somewhat by including a rating for some of the more obvious interventions with high potential on conceptual grounds, even if there was little or no empirical evidence to support them.

Looking ahead, these high potential interventions should merit attention by both researchers and program implementers. These interventions include farmer field schools for women farmers, job information for young women, firm certification programs for wage workers, and non-traditionally female skills training for women wage workers. They also include business associations and networks for entrepreneurs, as well as mentors and role models for young women. Both of the latter are well known and frequently implemented, but we could find no rigorous information on their impact on women’s productivity and earnings in developing countries. Preliminary results suggest that they are useful and potentially transformative interventions, but more data is needed about their workings and their labor market impacts.⁸⁹

COMPETENT IMPLEMENTATION

Lastly, competent project implementation is the linchpin to the successful execution of good project design. We have emphasized the importance of simple, clever design adjustments, but competent project implementation is an equally important and often under-rated final element in helping to account for the success of interventions. Competent implementation entails understanding the context—the where—and embedding interventions in the particular demographic and job challenges women face in different contexts. While it may be desirable to have cookie-cutter solutions that are transferable and replicable, the reality is that most solutions need to be adapted to particular types of women and specific country circumstances.

89 See Berger et al. for this report.



SUMMARIES OF COMMISSIONED STUDIES

INTRODUCTION

This section includes brief summaries of each of the 17 commissioned research studies that were part of the Women's Economic Empowerment Roadmap project. Some authors collected and analyzed their own data, while others reviewed and synthesized secondary data from other studies on a particular theme. Each summary has an editorial note to specify whether the study was based on the authors' own data, or review of others' work. The summaries are organized by job category, with the exception of the collaboration between UN Women and the UN Foundation, which cut across categories and appears at the end.

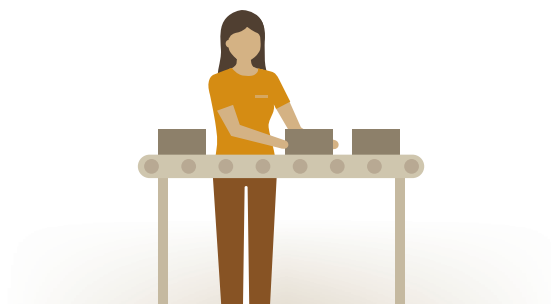
These summaries have been drawn directly from the authors' papers and represent the views of the individual authors alone. The lead researchers for the project considered, but did not always follow, the ratings used by the individual authors for the interventions reviewed. Full papers are available for reference online.



ENTREPRENEURSHIP



FARMING



WAGE EMPLOYMENT



YOUNG WOMEN'S EMPLOYMENT

IMPROVING THE PRODUCTIVITY AND EARNINGS OF WOMEN-OWNED AND/OR MANAGED ENTERPRISES IN DEVELOPING COUNTRIES: WHAT WORKS?

Christopher Woodruff and David McKenzie

EDITORIAL NOTE: The authors conduct a critical review of 20 studies that evaluated business training programs for women in developing countries. The studies included in their analysis can be found among the evaluation studies included in the Roadmap project online database.



INTRODUCTION

Business training programs are a popular policy option for improving the performance of enterprises owned by women around the world. The last few years have seen rapid growth in the number of rigorous evaluations of these programs in developing countries. The authors undertake a critical review of these studies—focusing on training programs aimed at female-owned and managed businesses—with the goals of synthesizing the lessons emerging from them, understanding their drawbacks, and identifying areas in which more work is needed.

WHAT DOES A TYPICAL BUSINESS TRAINING PROGRAM INVOLVE?

Variation in the training content and the sample composition complicate comparisons across studies. The existing studies come from a wide range of countries and target owners and firms with very different characteristics. As a result, the overall impacts include both heterogeneity in individual impacts and heterogeneity in training content. It is therefore important to examine the heterogeneity in who participates and in what is offered before making comparisons among studies.

WHO TAKES PART IN BUSINESS TRAINING EXPERIMENTS?

Most trainings are offered by microfinance organizations to their clients. Given that many microfinance institutions focus on female clients, this is particularly true for studies involving female microenterprise owners. A second strategy is to offer training to firms in a particular industrial cluster in a specific industry. A third strategy is to have individuals apply to take part in the training as part of a competition. A final approach is to offer training to a representative sample of the microenterprise population of interest. Most evaluations focus on existing businesses; the average age of a participant in a typical study is 35 to 45 years old, and there is substantial heterogeneity in the education levels of the participants, as well as the size of par-

ticipating firms. Some studies focus either entirely on female or on male business owners and do not report outcomes by gender.

TRAINING AND DELIVERY COSTS

All of the training courses studied are classroom-based training delivered to groups of individuals, although several of the studies supplement this with additional treatments of one-on-one follow-ups. Most of the training content has been developed or modified for the courses, and is delivered by experienced trainers; differences in quality, length of training, and in whether the training is delivered by a professional trainer or a microfinance staff causes variation in quality and cost of trainings. In all experiments training has been offered for free, and in addition, some studies have also provided small supplements for travel or food, or offered the prospect of grants as an additional incentive. Take-up of training varies, with the average take-up rate across the different studies being approximately 65 percent. Low take-up rates reduce the power of the experiment (and may even prevent the study entirely), and screening on initial interest in training does not guarantee high take-up. In most short courses there has been very little drop-out; longer courses have experienced more drop-out along the way.

TRAINING CONTENT

Training content focuses on general business skills that should be broadly applicable to most businesses, rather than technical knowledge or sector-specific content. The most common set of topics center around keeping business records and encouraging small business owners to separate household and business finances. There is significant overlap with financial literacy courses. Many courses, especially those targeted at potential rather than existing business owners, focus on generating a product idea and the steps needed to take it to market. Because of the variation in content, existing studies are unable to reveal which components of training matter most.

CHALLENGES IN MEASURING IMPACT

In order to obtain credible and useful estimates, studies must have sufficient power, measure impacts over a time horizon that is sufficient for impacts to be felt, deal with survey attrition and selective survival and start-up of firms, and consider the possibility that training changes how firms report business outcomes even if it doesn't change those outcomes. The authors discuss each of these challenges and assess how well existing studies have met them.

STATISTICAL POWER

The key determinants of the power of a study are the size of the sample, degree of heterogeneity in the sample, whether the intervention takes place at an individual or group level, and the size of the treatment effect. Most studies conduct individual level randomization, with the exception of a few studies working with microfinance groups. The typical study involves approximately 200 to 400 treated individuals or groups and similar numbers in the control group. Most studies of microfinance clients or firms in an industrial cluster contain a much wider mix of firms, resulting in coefficients of variation that can exceed 2 or more. The more different the firms are, the harder it is to detect changes in their average arising from treatment.

Many funding agencies consider 80 percent to 90 percent power an appropriate target and power of 80 percent or more is the standard in medical trials. However, many business training experiments fall well below these levels in terms of power to detect a 25 percent or 50 percent increase in profits or revenues; none of the studies achieve 80 percent power to detect a 25 percent change in sales. In practice, some of these studies attempt to further increase power by reducing the standard deviation of revenues or profits through truncating (capping the outcome at a specified level) or trimming (dropping observations with outcomes above a certain level) the top 1 or 5 percent of observations. This increases power, but if the training has large effects for a few firms and small effects for most, this may eliminate the very effect the study is trying to detect. Power will likely be much higher for detecting binary outcomes, such as whether or not a new business is started or whether or not a firm applies for a loan. Studies with low power to inform us about the impacts of training on ultimate business outcomes may therefore still be informative about other impacts of training.

TIMING OF EFFECTS

The short and long-run impacts of many policies can differ substantially, so a key challenge for impact evaluations is figuring out when to measure impacts. Ideally, studies should trace the trajectories of impacts, measuring both short and longer-term effects. Five of the 11 studies are very short-run, looking at impacts less than a year after training has finished. Another three look at impacts at exactly one year after training. One survey and half of another sample run surveys two years after the training, where they find that impacts differ in the short and medium-term.

SURVEY ATTRITION AND SELECTIVE SURVIVAL OR START-UP

Survey attrition is another problem complicating inference, especially if the reasons for attrition are business failure or refusal because of disappointment with the training. In addition to survey attrition, attempts to examine impacts of training on business outcomes face additional difficulties when training influences the rate of business survivorship, or the likelihood of business start-up. For example, one study found that training led to a 6.1 percent reduction in the rate of business failure for male owners. If training led to relatively unsuccessful firms in the treatment group staying in business—firms that would have closed had they been in the control group—then a straight comparison of profits or sales by treatment status would understate the impact of training. Studies address this issue either by using a bounding approach or by using a generalized propensity score to reweight their regression estimates to correct for the selectivity they find on observables like ability and wealth.

MEASUREMENT CHANGED BY TRAINING

A final challenge for measuring the impact of business training is measuring the business outcomes expected to change with the training. For instance, treated individuals may report using certain practices not because they do, but because the training told them this was important. Measuring profits and revenues poses further problems. Many small business owners do not keep written accounts, and owners of larger firms who do keep records may be reluctant to share them. Most studies have collected revenue data, but some have struggled with much lower response rates for revenues. Even when studies are able to obtain data on profits and sales, a concern for business training experiments is that business training changes the reporting of this data, irrespective of whether or not it actually changes profits and sales.

IMPACTS OF BUSINESS TRAINING INTERVENTIONS

With the issues of statistical power, timing, attrition, and measurement in mind, the authors examine the extent to which the studies reviewed have found business training to have impacts on business start-up, survivorship, business practices, and outcomes for owners and microfinance lenders, separating results by gender.

IMPACTS ON START-UP AND SURVIVORSHIP

Survivorship is difficult to examine when attrition rates are high, since firms that close down may be more difficult to interview; only one study found an effect on survivorship significant at the 5 percent level. That study found a 9 percent increase in the likelihood of survival 12 months after the training. Another study found a marginally significant reduction in the likelihood of survival for female firm owners. The remaining studies that report survivorship find insignificant impacts.

Across studies, training appears to have some success in generating short-run impacts on business start-up. However, this does not necessarily increase employment, since this may result from participants switching from wage work. Two studies have found that short-run increases in self-employment from training are coupled with reductions in the likelihood of wage work, so that net employment effects within the sample are insignificant. Among studies that have examined impacts over the course of 16 and 25 months, effects of training dissipate in the long-run.

Relatively few studies have looked at how training affects the selectivity of who starts up a business or of which businesses survive. The available evidence suggests training may enable less analytically able and poorer individuals to start businesses, and may prop up the survivorship of less profitable businesses. Since many studies look over only a short time frame, rates of business failure are often low. This issue is likely to be more important in contexts where impacts are measured over longer time frames, or where business failure rates are high.

IMPACTS ON BUSINESS PRACTICES

A first link in the causal chain from business training through to business profitability and growth is that business training has to improve the knowledge of business owners and result in these owners implementing at least some of the practices and behaviors that training has taught them. Almost all studies find a positive effect of business training on business practices, although the effect is often not significant once

the sample is reduced when it is split by gender. Many studies find relatively low baseline levels of business practices. Although most studies find significant increases in the use of business practices taught during the training, the magnitude of these effects, while sometimes large in relative terms, is often small in absolute terms. For instance, one study found that the use of a rule-of-thumb training leads individuals to be more likely to report separating personal and business expenses, keep accounting records, and to calculate revenues formally, with each of these measures increasing 6 to 12 percentage points relative to the control group. In general, if the magnitude of the changes in business practices is relatively small, we might expect to find it hard to detect impacts of these changes on business outcomes.

IMPACTS ON BUSINESS PROFITS AND SALES

Ultimately, from the viewpoint of an individual firm owner, training must result in increases in profitability in order for it to be worth the investment. However, as noted previously, many studies have struggled to measure profitability, and so not all studies consider this as an outcome. Few studies have detected significant impacts of business training on business profits or sales, although the confidence intervals are very wide in many cases. Among studies with the most power, one found training to increase profits for males by 24 percent and sales by 29 percent, but impacts were insignificant and close to zero for women. Another found no impact of training alone on profits of existing firms over either the short or medium run, but did find significant impacts of the combination of training and a grant on short-run profits, with these gains dissipating over time. Training is found to significantly increase profits and sales of the businesses started by women who were out of the labor force by approximately 40 percent, although the confidence intervals are wide. Several studies have emphasized the possibility that business training may have its strongest impacts on sales during a bad month, although this evidence is rather weak. For instance, training might help clients identify strategies to reduce downward fluctuations in sales. Since the costs of training often increase less than proportionally with the size of the firms taking training, subsistence microenterprises would likely need to see much higher percentage increases in profits to make training worthwhile.

IMPACTS ON MICROFINANCE INSTITUTION OUTCOMES

Since many of the studies have worked with microfinance clients, they have also looked at outcomes using administrative data from the microfinance organi-

zation. While these studies often have less attrition and span longer time periods, evidence of the impacts is mixed. Some studies find an increase in client retention rates, making training appear more profitable from the lender side. Other research has found training led to a 16 percent increase in loan size for males, a reduction in loan size for females, no change in repayment rates, and a change in the selection of who borrows, with individuals with higher predicted probabilities of default being less likely to borrow after training. Other research found no significant impacts of training on the likelihood of borrowing or loan size.

NON-EXPERIMENTAL STUDIES

The authors review three representative non-experimental studies that demonstrate both the potential and the challenges of the non-experimental approach. The first study from Bangladesh examines 1800 households in 87 villages, where MFIs offer credit bundled with “non-credit services,” such as vocational training. Results indicate that the total effect of the program is to increase self-employment profits by 175 percent. The majority of this increase—125 percent of self-employment profits—is assigned to the non-credit aspects of borrowing. However, there are some reasons to doubt the validity of this estimate, and in addition, it is not possible to determine how much of the measured 125 percent increase in profits is due to training or capacity-building alone. A second study also examined the effect of bundling microfinance with business development services and health information programs in the state of Chiapas, Mexico. The business training offered in the program was administered in 30-45 minute blocks at regular biweekly meetings. The MFI identified borrower groups who would participate in the bundled services when they were offered in the “control” community at a later point in time. The results indicate that business development services are found to lead to a 25-30 percent increase in household income – though the effect is not statistically significant once municipal fixed effects are included – and to make it less likely that a household is below the poverty line measured by assets. A third study assesses the impact of training provided to self-help groups (SHGs) in India. The training is sometimes provided by government workers and sometimes by NGOs, and administered through SHGs; the authors decide to offer training to both new (pre-credit) and established members of SHGs. The authors control for the selection into the SHGs by comparing members of SHGs with a group of individuals who have signed up for a SHG but have not yet received a loan. A well-

known problem with this approach is that individuals may borrow for only one cycle and then drop out from the group. There will be no similar dropout from the “control” group. The authors note that dropout rates on average are just over 8 percent, which suggests this is an issue, but perhaps not a mortal issue.

BOOSTING THE INTENSITY AND WORKING WITH LARGER FIRMS

Many of the training sessions are relatively short in duration, and the increase in business practices has been relatively small in a number of studies. One response to this is to provide more in-depth and individualized follow-ups on the training, while another has been to also focus on larger firms where management practices may potentially be of greater importance. The review discusses the results of studies that have pursued these two approaches.

INDIVIDUALIZED FOLLOW-UPS AND INDIVIDUAL CONSULTING

Three of the business training impact evaluations have also had a treatment group that followed up on the classroom training with individualized follow-ups. Two of the studies found no significant effects of an additional follow-up. A third study examines a more intensive follow-up, with more specific technical assistance tailored to the needs of the women’s businesses. Evidence suggests this more intensive technical assistance helped firms – women assigned to receive this technical assistance experienced a 19 percent increase in revenue.

A related literature looks at the impact of providing consulting services on a one-on-one basis to firms in order to improve business and management practices. The studies find some of the consultants’ recommendations were adapted for some months, but had been abandoned one year after training stopped. There is no significant impact of either treatment on profits or revenues. Another survey conducted one to three months after the consulting was used to assess impacts on the firms, with the authors finding large point estimates for the impacts on sales and profits, which are sometimes significant. A final study found that in large firms at least, intensively changing management practices can lead to substantial improvements in firm performance.

WHAT WE DON'T KNOW

There is now a range of studies that look at a variety of business training programs, and examine impacts on business practices, business outcomes and potential outcomes for microfinance institutions. However, there are still a number of open questions that existing studies have barely touched upon. It is still an open question as to who benefits most from training. As for additional impacts, most studies have done relatively little beyond looking at business practices to examine the channels through which training has impacts, in part because of their low power in detecting an impact on profits in the first place. Most of the studies take a single snapshot of the impact of the training at a relatively short interval after training has ended. Studies that look only within a year or so of treatment ending may miss effects that take some time to be realized – or conversely, we may find that effects that look very promising in the short-term dissipate over time. Furthermore, we know very little about what types of firms would choose to purchase training at market prices, and the effects of training on this subgroup of firms. Moreover, we know very little about whether there are market failures that prevent firms who would benefit substantially from training from purchasing this training at market prices. Finally, little is known about the importance of owners' personality traits as a driver of a firm's success. While several studies have incorporated some aspect of aspirations or entrepreneurial attitudes into their content, to date there is no research testing the relative contribution of both entrepreneurial and business training.

CONCLUSIONS AND SUGGESTIONS FOR FUTURE WORK

A number of challenges have hampered how much we can learn from these studies, with methodological concerns and heterogeneity in both training content, and in the characteristics of who is trained, making comparisons across studies difficult. Many of the key questions needed to justify large-scale policy interventions in this area remain unanswered. In order to learn more from the next generation of studies, the following elements are needed:

1. Use samples that are much larger—perhaps several thousand or more—or alternatively, reduce the heterogeneity of the sample by focusing on firms within one industry and size category.
2. Measure outcomes more effectively, improving the measurement of financial information and focusing on a specific industry or sector.
3. Design experiments to measure spillovers, which could include more use of GPS measurement and randomization of the intensity of training at the local market level.
4. Measure trajectories of outcomes over longer periods of time.
5. Test which elements of content matter, with larger samples and testing of different forms of training, in order to determine which elements of business skills have the most impact.
6. Understand market failures and build market-based solutions: almost every study has given training away for free and still experienced fairly low rates of take-up. There are many open interesting questions concerning how one helps develop a market for these business services and the types of policies that can overcome market failures that prevent firms from using these services.

CAPITAL, SKILLS AND THE ECONOMIC LIVES OF THE POOR: RECENT EVIDENCE FROM FIELD EXPERIMENTS

Oriana Bandiera, Robin Burgess, Selim Gulesci, Imran Rasul and Munshi Sulaiman

Editorial Note: The authors reviewed and synthesized 19 evaluations of interventions that address the capital and skills constraints of poor women in developing countries. The studies included in their analysis can be found among the evaluation studies included in the Roadmap project online database.

INTRODUCTION

Poor women throughout the developing world are typically engaged in low-return, irregular and insecure wage jobs or sluggish microenterprises, which yield low and unstable earnings. These women also typically have very low levels of physical and human capital. Taken together, these observations have led the design of many antipoverty programs based on the assumption that lack of capital and skills determines occupational choice, and that, therefore, transferring capital or skills will enable the poor to enter into more productive occupations and lead to sustainable improvements of their livelihoods.

This paper presents evidence from a series of interventions that tackle the capital and skills constraints either separately or simultaneously, to understand whether relaxing them can indeed transform the economic lives of poor women. Interventions that are included both: 1) explicitly target capital (cash, assets, or credit) and skills constraints (through training) either separately or simultaneously, and 2) are evaluated through field experiments that compare outcomes of randomly chosen treatment and control groups.

Target populations for the interventions reviewed include either: 1) the general population with the aim of transforming occupational choice on the extensive margin from wage labor to small-scale entrepreneurship, or 2) existing microentrepreneurs with the aim of increasing productivity and profit within the same occupation.

STUDIES EXAMINING TRANSFORMATION OF OCCUPATIONAL CHOICE

The first part of the paper reviews interventions that target the general population with the aim of transforming occupational choices from low-return occupations to small-scale entrepreneurship.

Capital and training: One set of interventions reviewed involves a transfer of capital and skills training for the ultra-poor. Evidence is based on findings from BRAC's

Ultra-Poor program in rural Bangladesh, and two similar programs, one in West Bengal and one in Andhra Pradesh (Banerjee et al., 2012; Morduch et al., 2012). Findings show that programs targeting the ultra-poor by providing a large asset transfer and intensive complementary training are effective in increasing earnings of very poor women. For example, the evaluation of BRAC's Ultra-Poor program showed that two years after the start of the program, beneficiaries had 34 percent higher earnings and increased per capita consumption of non-food items by 17 percent and food items by 6 percent.

Capital alone: A second set targets the general population and aims to transform occupational choices by providing capital alone. These include three field experiments on the introduction of microfinance—in the urban slums of Hyderabad, in Moroccan villages, and in Mongolian villages, and one that provides cash grants to groups of young men and women who are interested in starting a small business in Northern Uganda (Banerjee et al., 2010; Crepon et al., 2011; Attanasio et al., 2011; Blattman et al., 2011). This set of studies shows that capital transfers alone, in particular through microfinance, fail to transform women's occupational choices at the margin.

Training alone: A final group of programs intended to transform occupational choice are those that provide training alone, and are targeted at youth. The evidence includes programs that provide vocational and on-the-job (internship) training for young men and women in the Dominican Republic and in Colombia, and another that provides economic and livelihood skills training for adolescent girls in Uganda (Card et al., 2012; Attanasio et al., 2011; Bandiera et al., 2012). These studies show that providing skills to young women through intensive training programs that are comprised of a combination of trainings (e.g., vocational skills and on-the-job training, or livelihood and life-skills training) may increase employment and earnings of young women.

Taken together, existing evidence on the impacts of providing capital and/or training to the general population suggests that a combination of very large asset

transfer and intensive training (as in the Ultra-Poor program's model) leads to the creation of new small businesses and has a transformative impact on women's occupational choices and earnings. Capital transfers alone seem to be less effective in doing so. Intensive vocational skills training combined with life skills or on-the-job training can have large impacts on employment and earnings for young women in particular.

STUDIES AIMING TO IMPROVE PRODUCTIVITY OF EXISTING MICROENTERPRISES

The second part of this paper reviews studies designed to identify the obstacles faced by small enterprises, and determine what fosters their growth.

Capital and training: One set of studies examines the impact of providing business training along with capital grants (as well as training alone) to female-owned micro-enterprises in Tanzania and Sri Lanka (Berge et al., 2011; de Mel et al., 2012). Findings indicate the business training combined with cash grants may increase the profitability of female-owned businesses, but this effect may not be long-lasting.

Capital alone: Another set of studies looks at interventions that provide capital in cash or in-kind to micro-enterprises in Sri Lanka and Ghana (de Mel et al., 2008; de Mel et al., 2009; de Mel et al., 2012; Fafchamps et al., 2011). These evaluations show the differential impacts of capital between male and female-owned businesses. Findings indicate that grants in cash or in-kind often fail to generate growth in female-owned enterprises, except in businesses that were relatively large and successful (thus had more potential to grow) to begin with.

Training alone: The final set examines the impact of training alone—either business development or financial literacy provided to microfinance clients. Studies reviewed included the impact of providing consulting services to owners of small and medium-sized enterprises, and financial literacy in India, Peru, Pakistan, and the Dominican Republic (Bruhn et al., 2012; Drexler et al., 2011; Field et al., 2010; Karlan & Valdivia, 2011; Gine & Mansuri, 2011). Results indicate that business training alone is not sufficient to increase profits in female-owned businesses. Evidence from Bruhn et al. (2012) show that consulting services can have large impacts on the profits of small enterprises and earnings of their owners; however, since the study only reports average impacts on both male and female business-owners, further evidence is needed to understand whether effects hold for female-owned businesses.

Taken together, these studies show that interventions that transfer capital and provide business training to female-owned micro-enterprises may yield short-run increases in profitability, but only when combined. When provided alone and not intensively, neither capital grants nor training are sufficient to help female-owned small businesses grow.

POLICY LESSONS

A key implication emerging from this literature is that capital and skills constraints seem to be binding for both the creation of new enterprises and the expansion of existing enterprises, but the magnitude of transfers required is very large. Two main findings emerge from the papers reviewed:

- For creating new enterprises, capital transfers work when they are large and combined with intensive training. Small liquidity injections, such as microloans, are generally ineffective at starting new businesses. Training programs work when they are intensive, long-lived, and comprised of different types of training, such as on-the-job training combined with life skills, and when they are combined with large capital transfers.
- For helping existing enterprises, small capital injections are only effective for the most profitable businesses. Short trainings are largely ineffective.

CONCLUSION

A key policy question is whether the benefits of undertaking programs involving large and intensive transfers of capital and/or skills are worth the costs. Five of the 19 studies reviewed in this paper include a cost-benefit analysis. On balance, the Ultra-Poor programs fare well. The asset costs an average of \$300, and the analysis shows that two years following the transfer, beneficiaries earn a 7.5 percent annual return.

Another key question is whether the program is more effective in increasing the earnings of targeted women relative to an unconditional cash transfer. This comparison requires making an assumption about how the women would spend the cash transfer. As reviewed above, Fafchamps et al. (2011) find that unconditional cash transfers are less effective than transfers in-kind due to self-control issues. Nevertheless, separate analyses by the authors of this paper and Banerjee et al. (2012) determine that returns are larger than rates available at the bank.

Despite the sizable number of experimental studies emerging in recent years on the effectiveness of cap-

ital and/or skills transfers to women, the literature is still in its infancy and many open questions remain for policy research. First, evidence we have so far is based on evaluations of either single or multi-component programs that provide either capital or skills or both. Only the recent Berge et al. (2011) and De Mel et al. (2012) studies are exceptions, as they provide different variants (training vs. training with capital). Future work that tests effectiveness of different combinations and intensity of capital and/or skills transfers is needed. Second, there remains a question on the general equilibrium and targeted households and, through markets and transfers, affect prices, wages and other households in the targeted communities. Community-level randomization and large samples covering

a sufficient number of communities are required to understand this question. Third, most studies (with the exception of De Mel et al. 2012) are based on short or medium-run impact evaluations. We need further evidence on the long-run impacts of interventions that involve transfer of capital and/or skills. Finally, recent evidence suggests consulting services, though more expensive than standard training, can have a large impact on business practices and profits of small and medium enterprises on average (Bruhn et al., 2012). We have yet to test if these effects are similar across male and female-owned enterprises.

SUBSISTENCE, TRANSFORMATIONAL AND SOMETHING IN BETWEEN

Elisa Gamberoni, Rachel Heath and Emily Nix

Editorial Note: In this study, the authors report on analyses they have conducted of nationally representative data from Ghana, Rwanda, and Tanzania.

INTRODUCTION

Workers in the developing world, particularly in Sub-Saharan Africa, are frequently self-employed. Given that a large proportion of the labor force is employed in microenterprise, supporting them is key to poverty alleviation. Additionally, since women generally own smaller businesses, understanding gender traits that affect profitability is key for identifying appropriate strategies.

A key challenge to designing effective policy efforts is the substantial heterogeneity of microenterprises, and how this heterogeneity among entrepreneurs results in potentially heterogeneous outcomes for a given policy. Schoar (2010) argues in “The Divide between Subsistence and Transformational Entrepreneurship” that one important distinction, perhaps the most crucial distinction, is between subsistence and transformational entrepreneurs. Schoar defines subsistence entrepreneurs as those who turn to self-employment solely to provide subsistence income for themselves and their families. In contrast, transformational entrepreneurs establish businesses with the ability and goal to grow and create jobs for others.

Subsistence entrepreneurship may not be a first step towards transformational entrepreneurship for the vast majority engaged in subsistence enterprises. The implications of this understanding could be pivotal for policy. For example, if the goal of policy is growth, then

identifying which subsistence entrepreneurs are able to transition to transformational entrepreneurship and focusing a policy on these individuals, while supporting the existing transformational entrepreneurs, may be the most efficient policy. Similarly, if one’s goal is poverty alleviation, it may not be possible to dramatically increase profits of purely subsistence entrepreneurs by investing money into their businesses. Instead, it may be possible to achieve more impact by supporting growth policies that make jobs with better income paths available.

The goal then is twofold. First, identify subsistence and transformational entrepreneurs, and second, understand how the transition from subsistence to transformational entrepreneurship can be achieved.

METHODOLOGY

The aim of this report is to provide descriptive evidence on these two questions. To identify subsistence versus transformational entrepreneurs, the authors provide descriptive evidence on traits that could be used given ex post income results. The report uses nationally representative data from Ghana, Rwanda, and Tanzania to identify gender-specific traits that affect earnings. The analysis starts by looking at the difference in the mean and variance of earnings between wage and self-employed workers conditional on key traits

such as gender, age, and education. The study then categorizes the diversity of personal traits and input usage within broad microenterprise categories such as whether the enterprise has employees.

While the report draws conclusions with data from Ghana, Rwanda and Tanzania, it suggests that aspects of the findings persist in a variety of settings in Sub-Saharan Africa. Given that each country displays substantial heterogeneity within each of the broad classifications, the report then explores how the group that is targeted for a specific intervention can affect both the treatment effect found for that a particular intervention, and the overall distribution of earnings. The evidence is presented to examine the potential usefulness of interventions that have been demonstrated to have specific effects in one country in other contexts. Such results also provide a bigger picture of the costs and benefits of an intervention, by placing the results in a countrywide distribution of income.

FINDINGS

Self-Employment in Ghana, Rwanda and Tanzania:

The data show that self-employment tends to provide marginally higher average income but much higher variability in income. There are distinct gender and country differences in the type of primary employment held. In Ghana and Tanzania, very few women report paid employment as their primary form of employment. Most women in Tanzania work in agriculture, but close to 20 percent report self-employment as their primary form of employment. In Ghana, the majority of women report self-employment as their primary form of employment. In Rwanda, close to 80 percent of women report agriculture and wage employment as their primary employment, with a much smaller percentage reporting self-employment as their primary form of employment. Men are more likely than women to report wage employment as their primary form of employment in all three countries.

Self-Employment: Higher Mean, Greater Variance in Income:

Self-employment, relative to wage employment, offers marginally higher average wages for men. However, self-employment is characterized by far greater variability in earnings. For women, self-employment offers, relative to wage employment, higher average earnings only in the case of Ghana. This is again accompanied by higher variability. The results thus indicate a positive relation between higher earnings and volatility. Men have substantially higher average earnings, both in wage employment and in self-employment, and greater variability in earnings.

Unconditional and Conditional Cumulative Distribution Function of Incomes:

The authors first look at the unconditional cumulative distribution function (CDF) of earnings for each gender in wage employment and self-employment in Ghana, Tanzania and Rwanda in order to see directly how earnings of wage versus self-employment workers compare at each point in the earnings distribution. If the CDF for the self-employed is below the CDF for wage workers, then at these points the self-employed make less on average than wage workers. For Tanzanian and Rwandan women, self-employed workers make less income than wage workers throughout the whole earnings distribution. For men in these two countries, only a tiny minority do better in self-employment. In Ghana, at the lower end of the distribution, where wages are lower, both male and female self-employed workers earn less than wage workers; however, at the upper end of the distribution, where wages are higher, self-employed workers out-earn wage workers. In Tanzania and Rwanda, by contrast, the upper end of the earnings distribution is very similar among wage and self-employed workers, for both men and women. Across countries and genders, there are more workers with very low earnings in self-employment than wage employment.

The conditional CDFs include the independent variables of education, gender, age, marital status, and whether the individual has a savings account. For Ghanaian men in both wage work and self-employment, wage work at the lower end of the earnings distribution garners higher income than self-employment. However, conditional on observables, self-employment is more profitable than wage work among those with higher incomes (both for those currently in wage work and the self-employed). For Rwandan men and women, the results from the graphs of the conditional CDFs are similar, though the point where the conditional CDFs cross is different. For Tanzanian men the exact opposite is true. For Ghanaian women, the story is different—among wage workers with low or high incomes, these workers would be better off self-employed. Among those with middle incomes, wage workers earn more in their current profession. However, self-employed women would be better off in wage work across the spectrum of earnings. For Tanzanian women, the results are somewhat similar to those for Ghanaian women. Some differences do exist, though, as for self-employed women, self-employment appears to be preferable among those with lower incomes.

It is important to point out that the explanatory power of the authors' regressions is quite low. This means that some important explanatory variables, such as risk aversion or entrepreneurial ability, are not a part of this analysis.

HOW MUCH HETEROGENEITY CAN BE CAPTURED BY STANDARD POLICY-RELEVANT SPLITS?

One question that the heterogeneity documented in the previous section prompts is whether policymakers who are interested in targeting certain parts of the earnings distribution can do so by clustering entrepreneurs by rough categories (such as personal traits related to business success). The data indicates that traits such as age and education might be more appropriate for constructing homogeneous groups of male and female entrepreneurs in terms of earnings (and thus for constructing target groups).

In each of the three countries, between 32 and 36 percent of the male-female gender gap in wages can be explained by differences in mean characteristics. There are several important things to note about the remaining unexplained percentage of the gender wage gap. The first is that in each country, the difference in profitability of businesses run by older versus younger workers is bigger for females than males.

While the remaining results unfortunately do not explain the gender gap, the lack of explanatory power of variables such as education or number of children is an important result itself. Women do not seem to be penalized for having children, and they are able to translate their education into earnings at the same rate (or even more so in the case of Tanzania) as men. The authors posit that a large part of the gender wage gap appears due to variables more difficult to measure, such as access to business networks or specific choices when running a business (such as men taking greater risks) that result in greater average profits for men.

POLICY IMPLICATIONS

The analysis based on Ghana, Rwanda, and Tanzania shows that a classification of entrepreneurs based on broad categories (such as the dichotomy of necessity versus opportunity or the size of business) provides a useful categorization. However the relevance of individual specific traits demonstrated so far in this paper shows that additionally considering the traits of individual entrepreneurs helps researchers and policy makers to identify groups that are homogenous in terms of earnings.

The analysis shows first that traditional traits such as education, experience, marriage (which can be seen as a proxy for time availability) do not fully explain occupation choice. Based on the observable traits, certain individuals would be better off in either wage work or self-employment. Unexplained reasons behind oc-

cupational choice might include risk aversion. For example, average self-employment earnings for men are larger but more volatile than earnings in wage work. Along the same lines, we find that men have on average higher but more volatile unconditional earnings in self-employment.

Looking at business profitability, the authors find that across all countries under analysis, female owners enjoy a premium on their age compared to men. While the authors are not able to fully explore the reason behind these results, age might reflect the experience of the entrepreneur in running a business. Women might enjoy a premium if their experience allows them to reduce the disparities they face in other fields. For example, men might find it easier to build a network and to obtain information compared to women. However, this disparity might be reduced via experience. In the case of Tanzania, other variables also affect male and female entrepreneurs differently: compared to men, women appear to enjoy a premium on education but are penalized if they are married. The former might still reflect the role of education in allowing women to reduce gaps in other dimensions. The latter might reflect the fact that married women have less time to devote to their businesses due to household duties

Differences in average endowments explain only part of the gap. However, among the observable variables, access to a saving account appears particularly important in the countries for which the authors have this information (Ghana and Rwanda). Compared to returns to traits, policy makers can more readily affect the difference in the average savings endowment. The authors thus propose an exercise in the next section that builds on these findings.

INCORPORATING RANDOMIZED INTERVENTIONS RESULTS WITH THE TYPOLOGY OF ENTREPRENEURS: THE EFFECT OF MAKING SAVINGS ACCOUNTS ACCESSIBLE

In Dupas and Robinson's paper "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya" the authors find that providing access to an interest-free bank account to the self-employed increases productive investment. Given these results, Gamberoni, Heath, and Nix use the measured effects of providing savings accounts and demonstrate the impact on women entrepreneurs' income of expanding the intervention to the entire population in the three countries in the cross section: Ghana, Rwanda and Tanzania.

Overall, the authors find that the biggest effects of the intervention were concentrated around zero growth

rates. That is, the intervention shifted the earnings of some entrepreneurs who would be making slightly negative profits toward slightly positive profits. While these effects may not prompt the type of explosive

growth that generates substantial job creation, these small effects may be particularly important for entrepreneurs near the subsistence level.

BENEFITS OF NETWORKS AND MENTORS

Vital Voices Global Partnership

Editorial Note: The authors summarize a mixed-methods study with members of Vital Voices' women's business networks in Nigeria and Argentina.

Business networks are a key source of information, advice, access to markets, partnerships and policy influence, as well as encouragement and prestige. Formal networks also offer services and training to their members. Particularly in countries where contract enforcement is weak, business networks provide referrals, reputation signaling and informal sanctions that facilitate business activity.

Women in business are less likely than men to belong to formal business networks and may be constrained from joining by social norms and explicit barriers limiting their membership. The Global Entrepreneurship Monitor's *2010 Women's Report* found that women entrepreneurs across a range of countries had smaller and less diverse networks and tended to rely more heavily on personal sources of advice than men, leaving them at a disadvantage for growth, innovation, and internationalization.¹

Networks created by and for women are a means for businesswomen to support each other's growth and, through the connections of some of their members, establish relationships with the wider business community.

A recent study by Vital Voices Global Partnership², examined the perceived benefits of women's business networks—including chambers of commerce, professional and trade associations, and entrepreneur networks—in Argentina and Nigeria. The study used a standard questionnaire followed by semi-structured interviews with a subset of survey respondents.³ Respondents were both salaried professionals and entrepreneurs, reflecting the makeup of the networks themselves.

BENEFITS

More than 80 percent of Argentine respondents reported that learning from mentors, being a mentor to other women, making professional contacts, receiving training and new knowledge and gaining professional visibility were important benefits of their formal professional networks. Findings were similar for Nigeria: more than 90 percent of participants reported that making professional contacts was an important benefit of their professional networks, as were learning from mentors, being a mentor for other women, professional visibility, and receiving training and new knowledge. Although these businesswomen also cited socializing or making new friends as a benefit of participation, this was listed much less frequently (67-71 percent).

Networks also benefit women as a source of advice. From their business networks as a whole, 36 percent of Argentine and 45 percent of Nigerian participants reported that they received advice from other participants frequently. The most frequent types of support Argentine members had requested from other participants were contact information for business relationships (23 percent) and confidential business or salary advice (13 percent). Nigerian participants had also asked for contact information for business purposes (31 percent) and confidential business or salary advice (27 percent).

Half of the women entrepreneurs surveyed in both countries look to personal contacts for access to finance, though such contacts are much less likely to be used for other business-related advice, such as finding new businesses to partner with (33-45 percent) or putting together a business plan (less than 20 percent).

1 Donna J. Kelley, Candida G. Brush, Patricia G. Green and Yana Litovsky, *Global Entrepreneurship Monitor- 2010 Women's Report*. Boston: 2011, Babson College, Entrepreneurship Research Association, p.29.

2 Berger et al., forthcoming.

3 100 participants from Voces Vitales Argentina (VVA) and 168 participants from WIMBIZ (Women in Management, Business and Public Service Nigeria) responded to the survey; 30 of these women in Argentina and 25 in Nigeria participated in semi-structured interviews that probed more deeply into the women's experience with business networks.

The in-depth qualitative surveys revealed that networks provide women with “intangible” benefits such as increased confidence and support. Several respondents mentioned that the value added of the network is to provide a space where women can talk about work-life balance issues, which they do not feel comfortable to discuss or solve in a mixed gender setting.

Women who participate in these networks belong to multiple networks, which serve different purposes in their business and personal lives. Specifically with respect to formal business and professional networks, most respondents belonged to both women’s networks and mixed male-female networks.

CHALLENGES

One of the challenges to participating in formal professional networks may be time constraints that women face as they seek to balance home and work responsibilities. Making time for participating in network events appears to be more difficult for Nigerian than Argentine participants. Balancing home and work responsibilities was seen as a major or significant barrier by 44 percent of business owners in Nigeria and 37 percent in Argentina, and this challenge was more difficult in both countries for women managers, executives and professionals. Lower reported difficulty in Argentina may be partially explained by the fact that 51 percent of participants have no children at home, while only 28 percent of Nigerian participants have no children at home. Some respondents requested that events be held during lunch hour or at other times in the work day in order to include women who could not meet after work hours.

FUTURE RESEARCH DIRECTIONS

This research covers only two countries, focusing on women who are relatively well-off in their countries and already participate in business network activities. The research cannot tell us about the larger population of businesswomen who do not participate in business networks and the barriers that may inhibit their participation. Additionally, the focus on formal networks overlooks many network relationships, which tend to be informal.

Comparisons with businessmen in similar settings are needed to further explore differences between men and women’s networking behavior and benefits derived from participation.

Longitudinal studies are needed to investigate how network participation affects the business performance of women-owned firms, and whether effects on

performance differ by gender of business owner and network gender balance.

Mapping business networks by gender could be a complicated exercise, but important to develop our understanding of network inter-linkages and how women’s networks can maximize the benefits their members are seeking. The use of LinkedIn and Facebook suggests that social network analysis through online networks may offer a promising avenue to develop the means of valuing the nodes and connections, or linkages between nodes, in women’s business networks, and even comparing them to men’s networks.

A willingness to pay approach may be useful to better assess which types of networks women prefer to join and what value they place on membership.

Research should also consider how different models of network sustainability affect network access. In particular, there is a need to examine the degree to which women’s business networks, which tend to be new networks, are embedded in existing socio-economic structures. Such embeddedness could be beneficial to members by yielding stronger network ties and trust, but may exclude businesswomen who could make use of these network connections and bring new perspectives and sources of information to the group.

Finally, further work is needed to bridge the divide between academic studies of network access and benefits, on the one hand, with development interventions designed to form and strengthen networks, on the other.

WOMEN WHO SAVE: A COMPARATIVE ANALYSIS OF ECUADOR, GHANA AND KARNATAKA, INDIA

Cheryl Doss, Carmen Diana Deere, Abena D. Oduro and Hema Swaminathan

Editorial Note: In this study the authors report on analyses they have conducted using data from the Gender Asset Gap project.

INTRODUCTION

As part of the effort to develop interventions that increase women's savings, this paper offers a detailed descriptive analysis of women's savings in Ecuador, Ghana and the Indian state of Karnataka. With data collected by the Gender Asset Gap project, the analysis summarizes which women have savings, what kinds of savings they possess (formal or informal), and how these are related to both individual and household characteristics. In addition to information on women's savings, the paper offers information on men's savings, allowing for a comparison of gender differences in savings patterns.

METHODOLOGY

The Gender Asset Gap project is a joint initiative of an international research team that has collected individual-level asset data to calculate measures of the gender asset and wealth gaps. The project has collected nationally representative data in Ghana and Ecuador and data representative at the state level for Karnataka, India. All physical and financial assets are included, including both formal and informal means of savings. The data collection involved both extensive qualitative fieldwork and a household assets survey. The survey included both an assets module on all household assets and an individual module, asked of two individuals within the household, which included detailed information on their own financial assets. In Ecuador, the sample of 2,892 households is representative of rural and urban areas and the two major regional geographic and population groupings of the country, the sierra (highlands) and coast. A total of 4,668 persons completed the individual questionnaire, including the financial assets section. In Ghana, a total of 2,170 households were surveyed and 3,272 persons answered the individual questionnaire; the survey is representative of the ten administrative regions of the country. In Karnataka, a total of 4,110 households were surveyed across the rural and urban areas of nine districts covering all agro-climatic zones of the state and 7,095 individuals completed the individual questionnaire.

COUNTRY CONTEXT: ECUADOR, GHANA AND KARNATAKA, INDIA

The three countries surveyed differ along a set of important dimensions, including population, urbanization, and level of development. The population of Ecuador is 14 million; Ghana's is 25 million; and the state of Karnataka's is 52 million. Ecuador is both the most urbanized and the most developed of the three. Over two-thirds of its residents live in urban areas and the country has a Human Development Index (HDI) of 0.720. Ghana, like much of Sub-Saharan Africa, is undergoing rapid urbanization—while under 30 percent of the population lived in urban areas in 1970, that figure rose to 44 percent by 2000. Its HDI is substantially lower than Ecuador's at 0.541. Finally, Karnataka, despite being relatively urbanized compared with other states in India, is still much more rural than either Ecuador or Ghana, with only 38 percent of its population living in urban areas. Karnataka's HDI is marginally lower than Ghana's at 0.519.

FINDINGS, IMPLICATIONS AND RECOMMENDATIONS

The overall levels of savings are low for both men and women in the three countries analyzed. The Gender Asset Gap survey results indicate that of the total respondents, 42-47 percent of the respondents have a formal savings account or informal savings. But the rates for formal savings accounts are lower, ranging from 28 percent in Ghana to 36 percent in Ecuador. Efforts are needed to increase both the incidence of holding formal savings accounts and the level of savings for everyone, both men and women. The poorest segments of society are typically the least likely to have any form of savings. In addition, those that do have savings save quite small amounts, either in formal accounts or through informal means. Finally, there is a gender gap, especially in the incidence of formal savings accounts, and among urban men and women in Ecuador, with regard to the value held. Thus, efforts should target women and the specific constraints that they face.

CHARACTERISTICS OF SAVERS AND THE RELATIONSHIP OF SAVINGS TO ASSETS

The poorest quintiles are typically the least likely to have any form of savings. In both Ecuador and Ghana, urban women in households in the bottom 40 percent of the wealth distribution are more likely to have formal savings accounts and informal savings than rural women in the bottom two quintiles. Karnataka shows a different pattern, with rural women in the bottom quintile demonstrating a higher incidence of formal accounts than urban women of the same quintile, and rural women in the second to lowest quintile having a higher incidence of informal accounts than urban women of the same quintile. These results suggest that recent efforts directed at increasing rural women's savings in Karnataka may be having an impact.

There is not a clear pattern across the three countries on the incidence of savers by women's marital status. In both Ecuador and Ghana the highest incidence is found among never-married urban women, while for Karnataka it is among urban widowed/divorced/separated women.

Women's illiteracy rates are often used to explain their low participation rates in formal banking and savings. A higher share of literate women has savings accounts than illiterate women. Illiterate women in rural Ecuador, rural Ghana, and urban Karnataka, in particular, have very low formal savings rates. It may not be that illiteracy itself is a barrier to formal savings, but rather that those who are illiterate in those particular areas are also among the most disadvantaged in many related ways. Yet in Ghana, 21 percent of illiterate urban women do have formal savings account, suggesting that it is possible to reach illiterate women with formal accounts.

With respect to employment, the incidence of formal savers is highest among wage workers in all three countries and also among employers in urban Ecuador and Ghana. In all three countries, individuals employed in the formal sector are often required to have a bank account into which their salaries can be deposited.

In the context of household wealth, savers are concentrated in the top wealth quintile, particularly in Ghana, and with respect to urban women in Ecuador and Karnataka. Women savers are underrepresented in the lowest quintile in Ecuador, Ghana and rural Karnataka.⁴ In all three countries, rural women savers are more likely than urban women savers to live in a

household where someone owns the residence and owns land. In addition, a higher proportion of savers than non-savers in each country live in households that own other real estate or a business.

SAVINGS AND ASSET ACCUMULATION

Data on how assets were acquired allows analysis of the relationship of savings to asset accumulation. Women save to purchase major household assets, but rarely do they purchase real estate with only their own earnings. Women in Ghana are an exception; most women who purchase their dwelling or other real estate do so using only their own earnings. However, women account for less than 40 percent of the owners of these assets. In both Ghana and Ecuador, however, where the majority of individual owners of businesses are women, a relatively high share of female business owners utilized their own savings to start their business. Of course, many of these businesses are small and undercapitalized.

FORMAL SAVINGS ACCOUNTS AND INFORMAL SAVINGS

In all three countries, men are more likely than women to have formal savings accounts. In addition, the average balance (for those with positive account balances) is higher for men. Yet many women have formal savings account but maintain a zero balance. After their earnings are deposited into the account, they withdraw the money to use for regular expenses. Thus, programs that simply make it easier to open accounts (such as of savings and loans cooperatives in the case of Ecuador) will not necessarily result in increased levels of savings.

It was expected that Ecuador, which is more urbanized and more developed, would have higher levels of formal savings accounts; however, the pattern is not this clear. The comparative data may indicate that recent efforts to extend savings programs in both Ghana and Karnataka have had some success. For example, in Ghana, although there are savings alternatives apart from bank accounts, the proportion of women who save using any one of these alternatives is much smaller than the proportion holding bank accounts. There has been a rapid growth in the number of savings and loans organizations that are designed to attract the small saver. However, most of these organizations are located in towns.

Many women keep cash savings at home, rather than deposit these into an account. Fifteen percent of rural

4 Overall, there is a close, positive association between the incidence of women having formal savings accounts and the household's quintile group, but there are some anomalies. For instance, 19% of the savers in urban Karnataka each are in the poorest two quintiles, while the proportions in the third and fourth quintiles are lower. This reflects, in part, the fact that there is a concentration of urban households in the poorest quintiles.

and 16 percent of urban women in Ghana have cash savings at home; the corresponding figures for Ecuador are 3 percent and 9 percent. This suggests that there might be an unmet demand for accounts, if they met the needs of women savers.

As an ongoing strategy, widening the network of financial institutions, particularly banks, and designing innovative savings products to address the specific needs of poorer households would help in bringing cash and other informal savings into the formal system.

Microfinance savings programs bridge the gap between formal savings accounts and informal savings. India has been relatively successful in bringing women into the microfinance sector, particularly in the southern states, including Karnataka, where a large majority of the informal savings held by women there is through microfinance savings programs. While these have been useful in mobilizing women's small savings on a routine basis, the incidence is much higher in rural than in urban areas; poverty is higher in urban areas. Further, the amounts that women have in microfinance groups are relatively low.

SAVINGS IN A BROADER CONTEXT: THE GENDER GAP AND THE INFLUENCE OF LABOR MARKETS

In all three countries the overall financial wealth of men is higher than that of women—even though women open and individually own formal savings accounts in both rural and urban areas and save through informal means. Increasing women's savings depends critically on women's labor force participation and wage rates—domains that also have substantial gender gaps in favor of men. The stagnation of women's labor force participation rates in India over the past couple of decades, in particular, is a worrying trend for women's overall economic empowerment.

Thus, it is hard to disentangle savings behavior from the broader context, wherein women's savings is associated with income they potentially control. Disadvantages in the labor market make it difficult for women to save substantial amounts of money on their own. Women in Ghana earn 35 percent less than men in the labor market. The wage differential is higher among the self-employed (51 percent) than in paid employment (25 percent). In Ecuador overall they earn 33 percent less than men. In Karnataka, the agricultural wage gap between men and women has increased in absolute and relative terms. As a percentage of the female agricultural wage rate, the gap increased from 33.8 percent to 53 percent between 1991 and 2001.

NEXT STEPS

A parallel analysis of women's access to credit would complement this work on savings. This corresponding analysis would consider whether there is a positive association in the incidence of women savers and the amount they save with whether they have or have had access to credit. Often it is the prospect of a loan that induces women to begin to save, either because it is a formal requirement to obtain credit, or because realizing an investment of a certain size requires that personal savings complement a loan. In addition, in countries such as Ecuador, where access to consumer credit is widespread, accumulating a down payment is often a precondition to qualify for installment payments. Women commonly consider making such installment payments a form of forced savings, one that allows a higher standard of living to be attained than would otherwise be the case. Correspondingly, further analysis of this topic should consider the relative role of access to credit as compared to savings in women's ability to accumulate assets.

FINANCIAL SERVICES FOR LOW-INCOME WOMEN: OPPORTUNITIES FOR ECONOMIC EMPOWERMENT?

Rekha Mehra, Payal Patel, Adithi Shetty and Anne Golla

Editorial Note: The authors review the evaluation literature to identify if and how financial services have contributed to women's economic empowerment. The 31 studies reviewed in detail can be found among the evaluation studies included in the Roadmap project online database.

INTRODUCTION

This report examines the available evidence on the extent to and ways in which financial services have (or have not) contributed to women's economic empowerment. Of particular interest are the ways in which microfinance enables women to better manage their money, reduce risk, increase consumption and, importantly, invest in or grow their businesses as a way to increase their incomes. The report also examines the evidence on agency dimensions of women's economic empowerment, in terms of women's ability to make and act on decisions related to economic activities, and to control economic resources and profits. Overall, this project seeks to highlight research gaps and identify priorities for research and practice as guidance for how to effectively invest in creating economic opportunities for women in the financial services sector.

METHODOLOGY

This review largely draws on rigorous quantitative impact evaluations, mainly randomized control trials (RCTs), operational studies that are also RCTs, as well as some less rigorous quantitative and mixed methods impact studies. In addition to individual studies and evaluations, the authors also reviewed systematic meta-evaluations on the impact of financial services, thus enabling the inclusion of results and assessments from a much larger set of evaluations. The authors chose a subset of studies based on the following criteria: (1) the study was rigorous or moderately rigorous; (2) it examined financial services in low and middle-income countries in Asia, Latin America and Sub-Saharan Africa; (3) it included a majority of women as the study sample; and (4) it measured short, medium, and long-term economic outcomes of access to or use of credit, savings, or micro-insurance. In total, the authors conducted an in-depth review of 31 evaluations on microcredit, three evaluations of savings products alone, and one on micro-insurance. Out of a universe of 20 meta-evaluations identified on credit, savings and micro-insurance, the review includes eight of the most recent ones. The authors also reviewed more

than 30 white papers, reports, policy briefs, articles and books.

FINDINGS: TAKING STOCK OF THE EVIDENCE ON FINANCIAL SERVICES

CREDIT

In theory, credit is a powerful mechanism for the economic empowerment of poor women as it can be used to reduce financial risk, smooth consumption and improve financial management, and to invest in businesses that increase earnings. Until fairly recently, poor women in developing countries had virtually no access to formal financial services. But now, due to advances in microfinance over the past 30 years, more than 150 million women worldwide have access to microcredit.⁵

Group-based methodologies are the most widespread form of delivering microcredit. While these methodologies differ in detail, they are typically organized around a common principle: as a substitute for collateral, they rely on group members to share responsibility for ensuring others repay their loans. The success is demonstrated by high loan recovery or repayment rates; the global average is at about 97 percent.⁶ High loan recovery is regarded as a key factor in the sustainability of microfinance. Another is the commercial approach it has adopted so well, aiming to recover costs via interest rate charges and fees with the broader goal of achieving the "double bottom line" of sustainability and social impact. Common among the successful group-based methodologies employed by microfinance institutions (MFIs) are solidarity group credit, village banking, self-help groups, and village savings and loans associations (VSLAs). Of the millions of active borrowers around the world for each methodology, the majority are women, with some institutions reaching women almost exclusively. Group-based methods are also often credited with "knock-on" effects, as they offer opportunities for women to build financial skills, exercise voice and leadership and network socially.⁷

5 Maes, J. P., Reed, L. 2012. State of the Microcredit Summit Campaign Report Microcredit Summit Campaign, Washington, D.C.

6 Source: MIX Market: <http://www.themix.org/about-microfinance/FAQ#6>

7 So far the effects of group methodologies specifically have not been systematically and rigorously studied.

While successful, group-based lending has drawbacks. For instance, it requires women to meet at regularly-specified intervals to be trained and conduct business, and the time spent can be onerous as women have many competing demands on their time. Groups can also be oppressive if they use coercive techniques to force loan repayment, as some do.⁸ As an alternative, some MFIs offer individual loans. Individual loans are still small in size, unlike traditional finance, but like group liability loans, do not require collateral. Peer-to-peer lending via web-based platforms, an innovative variation on the individual loan model, enables individual investors to make small loans to borrowers in developing countries. Because it channels credit from investors directly to borrowers, the model is less costly and hence more efficient.

DOES MICROCREDIT ADVANCE WOMEN ECONOMICALLY?

The review shows that impact studies are very diverse with respect to credit products, countries and contexts and results. However, the huge demand for microfinance provides strong evidence that it is useful and valued by clients, and is an important reason to continue to invest in programs, drawing upon the successes of models and products in specific countries and contexts and determining their appropriateness based on whether methodologies and products are for women/men, and the poor/less poor.

- **Household welfare and poverty reduction:** Both quasi-experimental and rigorous RCTs have not found conclusive results regarding the question of whether microcredit empowers women economically. There is mixed evidence among quasi-experimental studies and RCTs on whether microcredit can lead to poverty reduction, increased consumption, and women's empowerment. A series of quasi-experimental studies in Bangladesh found that credit given to women was more likely than credit provided to men to positively affect household expenditures and women's non-land assets, and that credit led to poverty reduction among women and their households, particularly among women in extreme poverty; however, these results were not consistently replicated in later research. Evidence is also mixed as to whether borrowers could diversify their income and reduce their vulnerability to shocks.
- **Business investment and growth:** Rigorous evidence from RCTs showed mixed results for a link between microcredit and business creation, while other studies show disappointing results of the overall impacts of microcredit on business cre-

ation and growth. For instance, findings show neutral or negative impact on the business outcomes of above-poverty line borrowers in the Philippines, while other findings show that credit increased investment in household businesses in Morocco, and positively impacted revenues. Several RCTs investigating specific operational dimensions of credit have produced valuable evidence that loans with grace periods particularly enable women to invest in their businesses, and that those women entrepreneurs with higher profits at the outset are more likely to invest in their businesses. Operational RCT studies can also illuminate other issues that would be worth investigating. For instance, what interventions are needed, perhaps beyond credit, to induce less profitable entrepreneurs to invest in their businesses?

- **Women's agency:** The evidence from both rigorous and less rigorous evaluations on the impact of microcredit on women's agency is quite mixed. While several rigorous and less rigorous studies claim limited impact, others find that improved economic outcomes for women contribute to some facets of enhanced agency, particularly within household decision-making. However, given the various methodological limitations, it is likely that these findings are overstated. There is thus a need for more rigorous studies on ways in which microcredit influences women's agency.

Gaps and Opportunities: Despite the great success of microfinance, the demonstrated demand and the huge strides made in meeting that demand, there is a continuing gap in access to microcredit among poor women. Women's exclusion from access to formal financial services is particularly high in Africa, the Middle East, and South Asia, areas of potential opportunity for investors who seek to close the gaps that remain for women. In addition, there is scope, on the research side, for rigorously testing product demand. As microfinance matures and continues to segment its market, there will be a need to test the kinds of products that are sought by women in more finely-tuned income groups. There is also a critical gap in loan products that are useful for women entrepreneurs. Research is needed to support the design of tailored products. Also, for some women micro-entrepreneurs, it may be necessary to offer other types of services that may include credit but also go beyond it to develop their business skills, and to make them "loan ready" and better able to leverage credit. Some MFIs and banks are already doing so by offering business management, financial literacy, or enterprise-specific training.

8 Bernstein, A. and Seibel, H.D. 2011. *Reparations, Microfinance, and Gender: A Plan, with Strategies for Implementation*, Cornell International Law Journal, Vol. 44.

SAVINGS

Savings is a way for poor women to accumulate sums of money that can serve many of the same purposes as do loans—consumption smoothing, risk mitigation, or with larger accumulations, investments in business creation or expansion. A significant advantage of savings over credit is that it does not involve repayment and the risk of indebtedness—important reasons why poor people can and want to save. Many MFIs now offer both credit and voluntary savings. Savings accounts also take many forms. Some accounts are completely flexible, and others are time deposits in which savings are held for fixed periods and offer higher rates than more liquid accounts.

Some quasi-experimental studies on the impact of savings show mixed results, with one study's findings showing weak effects on business formation, and another indicating higher business revenues among wealthier women. The results of rigorous studies report more positive results. Overall, each of the three rigorous evaluations found positive effects of savings on expenditures and, in Kenya, on women's business investments and, in Malawi, on input use and crop yields of men and women. Ashraf et al. also found more decision-making power in the household among women savers. Although these results come from just three studies, they are more clear-cut and favorable than those of the impacts of credit.

Gaps and opportunities: The strong evidence on the benefits of savings points to the need for MFIs to reach more women with more and better options for savings. Savings is a particularly favorable alternative for very poor women for whom credit is not feasible because they would have difficulty repaying a loan. For them, too, formal savings would be safer and more secure than the traditional ways of saving by holding cash or jewelry. Although informal savings groups help women save by providing discipline and group support, they are often riskier than more formal structures.

Knowing that some women have difficulty saving and that different products may be appealing to different profiles of women, there is an opportunity to invest in further product development research and testing. Finally, it would be helpful to know through additional rigorous research if the initial positive results of commitment savings on women's economic situation, especially business investment, hold up in other contexts and locations.

MICRO-INSURANCE

Micro-insurance has the potential to economically empower women by helping them to mitigate risk. Risk and shocks of various types can be especially harmful to the poor, particularly poor women, as their earnings are often irregular, and sudden death or illness can lead to persistent and cyclical poverty. In theory, insurance can prevent women and their families from having to adopt unfavorable coping strategies, such as selling off productive assets, and is also hypothesized to lead to greater investments by poor clients in areas such as education and businesses.

Various forms of microfinance include credit life insurance, life insurance for spouses, health, accident, property, crop and livestock insurance. The main providers of formal micro-insurance are small to large private and public insurance companies, which partner with MFIs, NGOs, trade unions and credit co-ops to offer insurance policies to their members. In recent years, there has been an upsurge in the number of MFIs, banks and insurance companies around the world that offer micro-insurance, and in client uptake of micro-insurance products. The ILO estimates that around 500 million people are currently covered by micro-insurance in the world's poorest 100 countries, Brazil, Mexico and South Africa.

Challenges to effectiveness: In spite of its large reach currently, for much of its history the micro-insurance industry has struggled to create successful models that are profitable and also widely taken up by the poor. A number of supply-side and demand-side factors have tended to limit the success of micro-insurance, though it is not clear to what extent these have been overcome in recent years to enable the expansion of the industry. On the supply side, developing and implementing effective distribution systems for insurance is more complex than providing credit and savings. Demand-side constraints are mainly that the poor, who have difficulty making ends meet day to day, are often unwilling to make regular payments for products from which they believe they may never receive a payout. Further, lower literacy rates and limited negotiation skills can prevent the poor from submitting claims, raising the issue of a need for guidance and support for clients, particularly women.

Gaps and opportunities: Despite the fact that micro-insurance has recently reached sizeable scale, not much is known about how women benefit from micro-insurance in terms of household risk management,

income, poverty, or business impacts. The review found no rigorous evaluations that assessed the impact of micro-insurance on women's economic outcomes. In fact, the existing empirical evidence on how micro-insurance affects clients' ability to cope with shocks is also very limited, and studies on crop or agricultural insurance do not disaggregate by sex.

What is missing at a basic level from the larger picture on micro-insurance is an understanding of the factors that have contributed to increased uptake among clients, the quality of insurance products and services delivered to clients, and the frequency with which payouts are made. At a level higher, a major research gap is the lack of evidence on the economic benefits that accrue to women and other clients from the use of insurance products, either alone or together with credit or savings. Therefore, it is not possible to assess what types of micro-insurance products and delivery mechanisms are effective or not. On the programmatic side, external investments would very likely be valuable in supporting the work of insurance providers and distributors to conduct outreach to women and the poor on the value of insurance and claims submission processes.

BRANCHLESS AND MOBILE BANKING

Branchless and mobile banking are promising new developments that have great potential to expand financial inclusion and facilitate access to financial services among the poor. Specifically, they can help to overcome the barriers of high costs and lack of proximity to financial institutions that often impede the poor from accessing financial services. In this way, they offer the prospect of enabling low-income people who commonly use informal financial services to readily access a range of more affordable, convenient and secure banking services via safe and secure electronic transactions.

Branchless banking includes banking via mobile phones as well as deployed technology such as point-of-sale (POS) networks, kiosks, smart cards and ATM systems. Branchless banking platforms serve as convenient delivery channels for various kinds of financial services, including loans, savings and insurance. Regulatory factors, which can vary dramatically in different country contexts, play an important role in determining if and how financial institutions can deliver mobile banking services, and through which institutional arrangements. Much of the infrastructure needed to support mobile banking and branchless banking services is still under development in most countries.

Gaps and opportunities: The number of mobile banking service deployments has increased substantially since the mid-2000s, and on-going product and service innovations continue to generate new opportunities. Mobile banking has experienced more rapid evolution and adoption in low and middle-income regions where there are higher wireless penetration rates. Given the relatively recent emergence of branchless and mobile banking, the evidence on its effectiveness is extremely limited. No rigorous impact evaluations are currently available. However, some early process and performance evaluations on mobile banking have sought to assess client demand for and uptake of these services, how clients use mobile banking services, and the effectiveness and costs of mobile-based financial transactions. Research has shown that mobile services can help clients overcome financial shocks, and that while mobile banking has the potential to increase financial inclusion, it has not done so thus far. Mobile banking in particular has the potential to support women's ability to access financial services in safer, more convenient ways.

There is opportunity for external investment to contribute to the expansion of mobile banking options that can benefit women users. A critical factor that needs to be considered in discussions on mobile banking is that there is a gap in women's ownership of mobile phones. Further market research on women's demand for and ability to purchase mobile phones could provide insights on how to bridge this gap. In fact, there is very little focus by the diverse range of actors in the industry on how to design and deploy mobile banking innovations that can expand reach to women users or address their financial inclusion needs.

Lastly, more targeted studies and evaluations that collect sex-disaggregated data are needed to understand to what extent and which women are among the users of branchless and mobile banking services, the factors that influence their uptake, and how branchless and mobile banking affect women's financial inclusion, ability to control financial resources, and savings and incomes.

CONCLUSION

The strongest evidence that credit works for poor women is the huge number who have demonstrated their demand for it. As there are still huge numbers of poor women who remain unbanked, this remains an area for donor investment. There is also great potential to invest in loan product development, especially

for women whose financial needs exceed the scope of group-based microfinance. On the research side, despite the immense literature on microfinance there is a very large gap in rigorous studies that afford comparability on how specific types of financial products, and different ways of delivering them, have affected women economically. The strongest empirical evidence on the impact of financial services shows that savings has a positive impact on women's businesses and expenditures. There is some limited rigorous

evidence that credit does. Given the positive impact of savings products, the microfinance industry should seek to enhance the accessibility of savings products for women at various income levels. Finally, given that both micro-insurance and branchless and mobile banking have recently experienced rapid uptake, but that very little is known in terms of reach to and impact on women, it would also be useful to fund operational and impact RCTs to develop and test how specific products meet women's needs and help them manage risk.

BREAKING THE METAL CEILING: FEMALE ENTREPRENEURS WHO SUCCEED IN MALE-DOMINATED SECTORS IN UGANDA

Francisco Campos, Markus Goldstein, Laura McGorman, Ana Maria Munoz Boudet and Obert Pimhidzai

Editorial Note: The authors use a mixed-methods approach to compare women owning businesses in male-dominated industries with female entrepreneurs in traditional sectors to understand where differences can be found.

INTRODUCTION

A range of factors have been discussed in the literature to explain the differences in productivity size, and growth between male and female-owned enterprises (Klapper and Parker, 2011; World Bank, 2012) including access to finance and time constraints. However, the sector in which the firm operates is consistently found to be a major determinant of gender-observed differences in performance and growth (e.g. Hallward-Dreimeier, 2011; Bardasi, Sabarwal and Terrell, 2011; Costa and Rijkers, 2012). Differences in sectoral choice among men and women are significant, with the vast majority of female entrepreneurs clustering in low value-added industries. With the highest female participation in entrepreneurial activities among all world regions (women represent half of non-farm business ownership according to Hallward-Dreimeier 2011), Africa is no exception. Women entrepreneurs in Africa tend to concentrate in hotels and restaurants, wholesale and retail trade, garments, textiles and leather goods, and other services (Bardasi, Sabarwal and Terrell, 2011). African men on the other hand have businesses distributed across a wider range of sectors including construction and manufacturing. Industry concentration is an important in determining future profitability and growth, but whether women's decision to enter these sectors is driven by constraints or preferences, is still an area of debate (see Bardasi, Sabarwal and Terrell, 2011, for an overview of this literature).

In this study, the authors seek to examine the role of a range of factors that may hinder or help women entrepreneurs to enter male dominated sectors. They do this in the context of Uganda, which shows a clear concentration by gender in certain industries: only 6% of women operate in male-dominated sectors (for this study, defined as industries where over 75% of enterprises are male-owned), while 34% of men have businesses in those industries (UBOS, 2011).

The authors use a mixed-methods approach to compare women owning businesses in male-dominated industries, hereafter referred to as crossover entrepreneurs, with female entrepreneurs in traditional sectors, or non-crossovers. The study looks at where differences can be found – from profits and productivity, human and financial capital, to skills and psycho-social factors – that explain why some women crossover and others do not. The study finds that women who crossover into male-dominated sectors make as much as men, and more than women who stay in female-dominated sectors. The decision to cross over comes from a combination of factors of which start-up capital – as for most entrepreneurs – matters more than human capital, but it is not enough. Linking quantitative and qualitative analysis, they conclude that both psychosocial and informational factors are predictive of a woman's decision to cross over to a male-dominated sector. In particular, this work suggests the importance of addressing information asymmetries about the returns to investments in male-dominated sectors, as well as the relevance of early exposure and access to role

models or mentors in order to help circumvent gender norms. Once in business, challenges such as access to finance and lack of networks and sometimes a hostile environment are the most prevalent, together with limited technical and managerial skills.

DATA AND METHODS

This paper draws on data from a sample of entrepreneurs in urban Uganda from within and just outside Kampala, which are mostly part of the Katwe Small Scale Industry Association (KASSIDA) and have been part of a World Bank-funded impact evaluation on

the impact of skills and managerial training in business performance. The baseline survey included a total sample of 326 women and 409 men, of which only 30 women owned businesses in male-dominated sectors. Table 1 shows the distribution of women and men across different industries and indicates the gender concentration, with crossover sectors identified in bold. The authors use this dataset (hereafter the KASSIDA dataset), which has detailed information on assets, inputs, other costs, sales, and profits, to compare the performance of crossovers with both other women-owned businesses in traditional female sectors and male-owned businesses in the same sectors.

TALBLE 1: NUMBER OF ENTERPRISES PER SECTOR

	FEMALE-OWNED		MALE-OWNED
Sector	Crossovers	Non-crossovers	
Barbershop/Hair Salon	0	63	7
Carpentry	4	0	44
Catering	0	107	2
Fitting and Machinery	0	0	11
Electricals	1	0	11
Foundry & Forgery	15	0	48
Metal Fabrication	7	0	185
Shoe Making & Repair	3	0	33
Tailoring/Knitting	0	126	68
TOTAL	30	296	409

This paper also analyzes the outcomes of a mixed-methods questionnaire prepared uniquely for this research. This questionnaire was administered to 183 female entrepreneurs – 63 working in the male-dominated sectors identified in Table 1, and 120 working in traditionally female sectors (catering, hair dressing, and tailoring).

Semi-structured interview instruments were prepared to capture a wide range of information about female entrepreneurs, including their background, family history, education, entrepreneurial capacity/tendency, access to networks, presence of role models, and a host of other factors. In addition to these quantitative measures, there were open-ended questions that allowed participants to supply answers in their own words and elaborate on the path that led them to a specific business sector. To complement information obtained in individual interviews, the research included 17 focus group discussions with crossovers, non-crossovers, clients, suppliers, and (male) employees.

THE PROFITABILITY AND PRODUCTIVITY OF MALE AND FEMALE-OWNED FIRMS

The authors investigate the differences in size and firm-level performance between firms owned by crossovers and non-crossovers, as well as between crossover firms and those owned by men operating in the same sectors. Their findings, summarized by Figure 1 and Figure 2 below, show that many of the women who cross over make higher profits than women who do not, and businesses owned by women who cross over to male-dominated sectors perform similarly to male-owned. They find that average profit of a crossover firm is more than three times as much as that of a non-crossover firm, and this difference is statistically significant. On the other hand, profit, revenue and capital are not statistically significantly different across male and female-owned firms in the crossover sectors. Thus females who operate in male dominated sectors were able to close the gender earnings gap.

FIGURE 1: DISTRIBUTION OF (LOG) MONTHLY PROFITS FOR WOMEN CROSSOVERS AND NON-CROSSOVERS

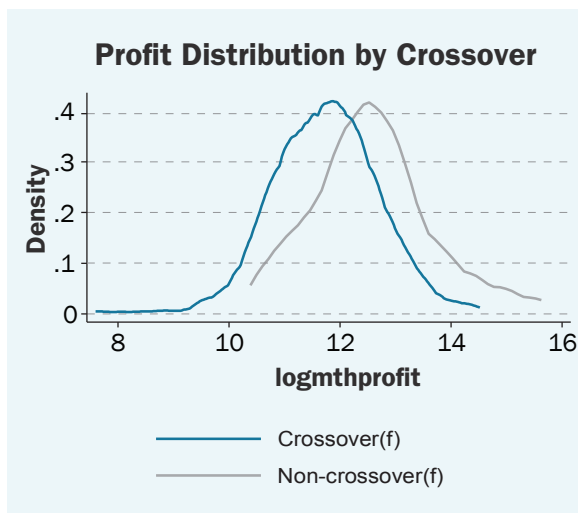
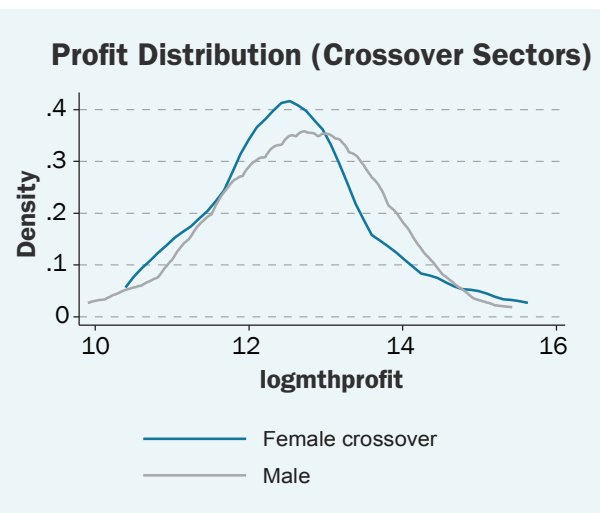


FIGURE 2: DISTRIBUTION OF (LOG) MONTHLY PROFITS FOR WOMEN CROSSOVERS AND MEN IN THE SAME SECTOR



Crossover firms operate at a larger scale with significantly higher levels of labor and capital than non-crossovers. Compared to males in their sectors, the sole core indicator that shows a significant difference between female crossovers and males is the number of workers, with female workers averaging 1.6 less workers than their male counterparts. This could be related to different allocation of capital and labor, but could also just be due to different sub-sector composition. Generally, women are able to achieve greater scale in male dominated sectors than in typical female dominated sectors and are able to reduce the gender earnings when they cross the gender sector divide.

WHO CROSSES OVER?

The women who break into male-dominated industries are clearly different, but there is no clear theory to explain why they do what they do. Research has focused most on the choice of sector as a driving factor of gender-correlated profit and productivity differentials, and on the general constraints to female entrepreneurial activity regardless of sector. But little attention has been given to crossovers.

Crossovers could be super-entrepreneurs (or as a non-crossover in the sample recognized “*Such women are “superwomen.” They have the characteristics of men*”), spotting a higher return sector and managing to make it there despite the disadvantages of smaller networks and discrimination. But they could also be average entrepreneurs but social pioneers, breaking norms because of their background and psychosocial context, or due to better access to information channels:

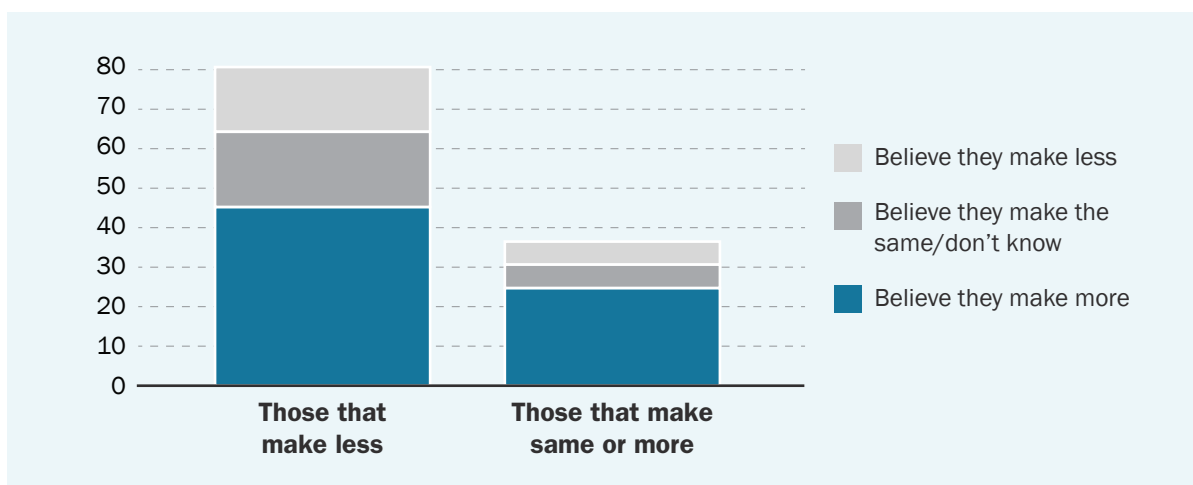
“No we are not different. It just takes a mindset and the necessary information to do this business”, recognized a foundry crossover.

The authors seek to understand the relative role of different factors in becoming a crossover. They divide these factors into three main groups. First is capital – both human and financial capital. Second, they examine the role of both cognitive and non-cognitive skills. Third, they look at a range of psychosocial characteristics including family background, role models, and an in-depth of the entrepreneur’s own account of how she ended up in her current profession.

INFORMATION

In addition to these factors, they look at one potential market failure that could explain why some women do not cross over: information about returns to crossing over. As shown by the data, women who cross over have significantly higher profits than those who do not; it is possible that women who remain in female-dominated sectors do not know they are making less. Regarding information, they find that the women who do not crossover believe that they make the same or more as those in the crossover sectors. As the figure below shows, some of these women are right and some are wrong.

The difference in size of the bars confirms that the majority of the non-crossovers has lower profits than the average profits for crossovers. Moreover, this figure confirms that non-crossovers are unaware of the potential profitability of crossing over. Looking at the



bar on the left for non-crossovers with lower profits than the average for crossovers, about three quarters of non-crossovers think they make the same or more than crossovers when, in reality, they do not.

HUMAN AND FINANCIAL CAPITAL

In short, human capital—in terms of education—does not appear to affect the probability that a woman entered a male-dominated sector. The development of skills or specific training is a relevant feature for most sectors, both for crossovers and not. In terms of other skills, the authors looked at a series of cognitive and non-cognitive ones, and results show that while the women who crossover may be different in some dimensions of skills, they are not more likely to score uniformly higher in skills that would aid them in being successful entrepreneurs.

And while availability of start-up capital does not seem to impact the choice of sector, women who cross over are significantly more likely (in two of the three specifications in the paper) to have delayed starting their business due to a need to save to accumulate capital. This suggests that women who lack start-up capital or sufficient income to save may be less likely to enter the more capital intensive male-dominated sectors.

THE RIGHT TYPE OF MENTORSHIP AND EXPOSURE

Having a first job in a non-male dominated sector is large and negatively associated with being a crossover. This suggests strong path dependence in these women's career paths—with an initial job in a non-crossover sector, they are much less likely to break the metal ceiling and switch. This is linked to the importance of exposure to the entrepreneur sector of work. This exposure takes two forms, male role models who can oper-

ate as 'gate openers, and the person (male or female) that provides an active exposure of these women to the sector. The active engagement of the role models in engaging the female entrepreneur in the activities of the crossover sector plays a relevant role in breaking traditional norms. The authors identify the women's reported role model in youth and find that women with a male role model are 55–74 percent more likely to be a crossover. This provides a critical manifestation of how men are involved in the transition of women to higher profit sectors. From the qualitative data, it appears that fathers in some cases were instrumental in introducing women to a different sector by providing relevant contacts, or by providing financial support at the moment to start up.

The importance of certain kinds of men is again evident when examining who first exposed the entrepreneurs to this sector. Relative to non-crossovers, crossovers are more likely to be introduced to their sector by fathers, male friends/community members, and other male family members. On the other hand, non-crossovers are more likely to be introduced to their sectors by mothers and teachers. Indeed, teachers are one of the main sources of exposure to the non-crossover sectors, particularly for the case of tailors who learn how to sew at school or attend special training provided by other institutions (church, charities and NGOs). This suggests that the education system, as it now stands, is one of the reinforcing factors in maintaining the gender segregation of labor.

A suggestion from someone, observing others, and being offered a job in the sector by a friend or family member are all significant and positive in predicting the probability of crossing over. On the other hand, on-the-job experience, in terms of working for a wage in

the sector, is not statistically significant. These results seem to confirm the importance of active engagement from others in enabling women to move into male-dominated sectors. In addition, the data suggests strong path dependence in these women's careers—with an initial job in a non-crossover sector, they are much less likely to switch.

The qualitative work shows that a very important intermediate step in the trajectory to becoming a crossover is an 'active exposure' to the sector, either by becoming an apprentice, actively learning the trade, or being taken to observe by an active intermediary or enabler—friend, family member who does not only suggest starting in the trade but also brings the person to either their own business or someone else's.

SUSTAINING A CROSSOVER BUSINESS

Given the fact that they are defying norms on what sectors women should work in, we might expect crossover entrepreneurs to be more isolated. When asked if they have difficulty establishing networks, 40 percent of crossover entrepreneurs say yes compared to only 14 percent of non-crossovers. And only 53 percent of them belong to a business association compared to 73 percent of non-crossovers. However, in some dimensions, crossovers are able to overcome networking difficulties. They know roughly the same number of people in their sector as non-crossovers do, although less of these people (but not statistically significantly less) are women. Fifty-four percent of them interact with other business owners at least once a month to discuss business issues, while this is true for only 39 percent of non-crossovers. And crossovers are equally likely to interact with other women to discuss business issues as non-crossovers.

Self-efficacy plays a positive role in entering the sector, but also in sustaining the business. Seasoned women entrepreneurs see themselves as able to effectively master all crucial aspects of their trade, no doubt by applying life skills they have developed in their paths as independent businesswomen and heads of household. This is also reflected in the fact that compared with non-crossovers, crossovers are less concerned about social perceptions of their actions and show lower fear of social shame.

Another potential dimension in which issues may arise for crossover entrepreneurs is in the harassment they receive as they operate their business. The major form of harassment that both crossovers and non-crossovers face is a threat to shut down the business (most commonly by the police), but this threat is significantly

more frequent for crossovers. In addition, crossovers experience more frequent vandalism of their premises. The third significant difference in harassment, however, unambiguously indicates the vulnerability of women who choose to crossover—they are almost twice as likely to experience sexual proposals than those who do not cross over. Harassment appeared prominently as part of the disadvantages of crossovers as seen by clients and community leaders.

DESIGNING POLICIES TO SUPPORT WOMEN WHO WANT TO CROSSOVER

The first ingredient in a policy to support women who wish to crossover is information. A significant majority of the women who have not entered male-dominated sectors think that they make the same or more as enterprise owners in these sectors when, in fact, they do not. And they recognize that information is a factor and it needs to come early in life: "No, they are not different [crossovers], any woman can do that kind of work, provided she is exposed early enough" noticed a salon owner. The provision of information will enable these women, in the first instance, to make a better informed choice about their sector of operation.

However, as our research shows, information alone is not likely to be enough. A second element of a potential program is to provide supportive engagement with individuals who can help support and/or guide the female entrepreneurs as they seek to enter and then operate businesses in male-dominated sectors. Ideally, this mentor will be drawn from the entrepreneur's existing network of family and friends, but it is not clear that sympathetic (or empathetic) outsiders will not work. In the qualitative work, both crossovers and non-crossovers agreed that they will allow for their daughters to cross over if someone reliable was to introduce them to the sector.

Third, while the authors do not find skills to be a binding constraint for women who crossover, the analysis suggests that it can be important to be exposed to the sector from early-on and one way is to work or do apprenticeships, ideally it seems in businesses owned by people within the networks of trust. The qualitative work makes a distinction between active and passive observation. Passive participation characterizes women in female dominated sectors. Active participation, which is key for crossovers, consists of being close to the business, either as wives, sisters or daughters, working in a business doing sales or managing the storefront, providing services and inputs for crossover business, and/or being invited to learn. Appren-

ticeships or other experience working in a crossover business may be a critical way to not only impart basic skills to potential crossovers, but also to provide this critical active participation.

In addition to these key elements, a number of other considerations may help with the success of this type of interventions. First, timing of different actions is important. Crossovers report requiring a longer time to start their businesses, because exposure does not happen early enough, apprenticeship and learning the trade takes time, and because the higher financial investment required to start the business requires a longer period of savings in order to be ready to invest. Therefore, these results suggest the importance of aiming to support women without much experience working in a traditional female sector. This would imply targeting younger women who are just entering the labor market or older women without experience in a female-dominated sector.

Second, if these interventions are to be tested on any substantial scale, it is important that they engage the local power structure given the potential disruption to long standing norms. These social perceptions will not only impact sector choice, but might also prevent women from accessing credit or financial support as well as building lasting networks.

Finally, once women start to crossover, it is critical that support to them be ongoing. As the data and words of our respondents indicate, the process of crossing over is a continuous one (e.g., with support for networks or crossover specific business organizations), with different issues arising at different stages in the process.

A META-ANALYSIS OF LAND RIGHTS AND WOMEN'S ECONOMIC WELL-BEING

Yana Rodgers and Nidhiya Menon

Editorial Note: The authors critically review the literature on how land rights affect women's economic well-being and autonomy. The empirical studies reviewed can be found among the evaluation studies included in the Roadmap project online database.



INTRODUCTION

An important innovation in agriculture is the formalization of land ownership through individual land titling to women farmers and joint titling to married couples. Existing evidence closely ties land tenure with increased investments in land and improved agricultural productivity, but also shows that very few women farmers share land or own land directly. This study offers a meta-analysis of the channels through which land titling affects women's productivity and earnings in agriculture, as well as other indicators of women's well-being and autonomy. As is understood, a strengthening in autonomy can have direct beneficial effects for women in terms of lower fertility, improved health and freedom from domestic violence. This review highlights some of the key themes and results from the many studies in this broad area, beginning with a conceptual framework of how land rights affect women's well-being, and ending with implications for more successful implementation of land registration and greater integration of such reforms with existing institutions and traditional frameworks.

CONCEPTUAL FRAMEWORK

In principle, land rights are positively linked to household behavior, economic well-being, and autonomy through increased security of land tenure and freedom from expropriation, greater access to credit (which is increased as women are able to use land as collateral), reduced vulnerability to food price shocks, and gains from trade in the rental and sales markets for land.

LAND RIGHTS, AGRICULTURAL INVESTMENTS, AND OUTPUT

Women own substantially less land than men across developing regions. The implications of these gender inequities in land holdings for agricultural investments and output are enormous, given the fact that among other things, insecure land tenure reduces the incentives of households to invest in their land. Of those studies that have an explicit focus on gender, several have documented substantial gender differentials in agricultural output and profits that have been linked to

inequitable access to agricultural inputs and to women's relatively insecure land rights.

Research has found that women-controlled plots have lower productivity as compared to male plots because of their restricted ownership of agricultural inputs such as land and fertilizer. However, several studies indicate that increasingly efficient allocation of land, labor, and fertilizer among household members could increase output substantially. A number of studies have demonstrated that women farmers are as efficient as men farmers, but in many cases face discrimination, which limits their access to inputs. Thus, increasing access to land equipment such as ploughs at appropriate times in the crop cycle would greatly improve productivity and women's incomes.

In addition to formal laws directed at addressing equity in land ownership, informal practices also play a significant role. More specifically, in regions of the world where crops that increase the demand for labor are planted, labor provided by wives is a statistically significant determinant of their share of land. A major contributing factor to gender inequities in agriculture has been growing population pressures on increasingly scarce land, which has weakened women's land rights since the early 1960s. In addition, inheritance serves as the primary means through which women acquire land, and most countries are still characterized by male preference in bequeathal practices. To ensure a more equitable distribution of property rights for women, some experts recommend more legislation that contains provisions for mandatory joint titling of land to couples and provisions that give priority to female household heads, which can help to protect women's rights to land in the event of separation, divorce or widowhood.

Another source of gender disparities occurs in land rental and sales markets. For example, research in Vietnam found that women who head households face bias in the market for land sales. Moreover, households with a higher proportion of female members appear to have a lower willingness to pay for secure property rights as compared to households with fewer female members. Closely related, women may be more risk averse than men in offering their land as collateral.

EVIDENCE ON LAND RIGHTS AND WOMEN'S AUTONOMY

How do women's land rights affect their autonomy and economic security? Studies from across Asia and Latin America have found a link between women's well-being and autonomy. Research from India, Thailand and Nepal indicates that land ownership can have a positive impact on women's self-esteem and autonomy, including authority in household decision-making, access to information about financial matters and probability of self-employment in the rural sector. Additionally, work in Nepal estimated an inverse relationship between women's land rights and children's malnutrition. This relationship is attributed primarily to the additional income and resources that women's ownership of land brings, rather than the empowering effect of land ownership. In Peru, increasing tenure security with the issuance of property titles to urban households enabled former squatters to work more hours in the labor market instead of staying at home to guard their land, with a resulting increase in income. In Ecuador, research findings suggest that when women own a larger share of household wealth, there is a greater likelihood that the couple will make an egalitarian decision regarding decisions to work and to spend income.

In Sub-Saharan Africa, stronger property and inheritance rights for women have been shown to have a positive effect on their well-being. For instance, property and inheritance rights for women in rural Tanzania had a positive effect on employment outside the home, self-employment, and earnings. In another study, the authors noted that in a sample of households with widows in fifteen countries in Sub-Saharan Africa, total value of inheritance, especially land inheritance, is significantly correlated to higher levels of assets and long-term household consumption. Further, legislation favoring women's control over assets was found to have strong impacts on children's (and particularly girls') schooling in instances of divorce.

Closely related to women's bargaining power within the household is women's control over resources in this domain, and several studies have found causal relationships between women's land ownership and their control over intra-household resources. In particular, household surveys from Bangladesh and South Africa indicate that the assets women brought with them into a marriage, including land, had a positive effect on the household budget share spent on education. Likewise in Ethiopia, land that women bring with them into a marriage as assets serves as a strong predictor of their control over productive assets during the marriage, including the right to rent land.

Greater autonomy within the home can translate into improved well-being for women, along such dimensions as health, freedom from domestic violence and educational attainment. Increased agency has been tied to decreased fertility in one study, while women's land and home ownership were both associated with a lower likelihood of being subject to physical and psychological abuse in another.

While research has found that increased property and inheritance rights can positively impact women's well-being and autonomy, estimates also indicate that legal reform does not necessarily lead to changes in household behaviors.

LAND TITLING AND ACCESS TO CREDIT

While the beneficial effects of land rights on farmer's investment incentives and on women's autonomy are well documented, there is less evidence on the impact of land rights on access to credit. An important reason why the formalization of property rights has led to little if any improvement in credit access, especially among the poor, is limited opportunities for investment, risk aversion and structural impediments that increase the difficulty of converting land into liquid assets. In principle, land titling may enable greater access to credit through the creation of an asset that can be used as collateral. However in practice, the ability to successfully use such assets as collateral depends on reliable information on property rights and transparency in the regulatory structure.

While some studies have documented a positive effect of land rights on access to credit, these positive effects have mostly applied to richer households, urban areas and larger-scale farms, with little impact on poverty reduction. Some researchers argue that if poor households are excluded from local organizations in charge of identifying those with the most need, then credit may be misdirected.

A growing number of studies indicate that when women do have greater access to credit, they experience improvements in economic security and bargaining power within the household. For example, one study found that microcredit in rural Bangladesh has a strong positive effect on women's labor supply, while income effects associated with the increased credit reduced men's labor supply.

RESEARCH LESSONS AND POLICY IMPLICATIONS

RESEARCH LESSONS

1. **Gender discrepancies in land ownership remain pervasive:** This analysis has shown that the means by which men and women acquire land vary across regions and communities. Such means include inheritance, participation in land sales and rental markets, government land titling programs, state-driven land reform and resettlement schemes. Women in numerous developing countries also gain access to land through informal methods or traditional household arrangements that vary considerably across regions and countries. However, a large body of literature has documented that women experience disadvantages relative to men in many of these processes.
2. **Gender equality in land ownership and inputs increases agricultural productivity:** The research reviewed in this study collectively makes a strong case for the efficiency-enhancing effects of women's land rights. When women have more formal control over land—whether it be through land titling, improved documentation, or stronger communal rights—their productivity as farmers increases. Studies across developing regions have clearly documented that once access to inputs (land, fertilizer, credit) is controlled for, women are as productive and technically efficient as men.
3. **Women's land ownership improves economic security and well-being:** Further, the meta-analysis has made a strong case for the welfare-enhancing effects of women's land ownership. Women with stronger ownership rights over their land have more decision-making power in the household, experience greater autonomy and garner more respect from family members. They are also more likely to bolster their own economic security through self-employment and higher wages, which, in turn, can reduce a household's vulnerability to poverty.

POLICY IMPLICATIONS

1. **Large-scale land titling programs help women:** Access does not ensure ownership or actual rights to the land. As described in this analysis, rights need to be guaranteed in such a way that women can exchange, lease, bequeath, sell or mortgage their land in an enforceable manner. Recommendations for policy reforms supported by these

findings center on changing the legal structures that govern women's land rights. Mandatory joint titling in particular raises the likelihood of women gaining secure land rights, with voluntary joint titling somewhat less effective in providing large proportions of women with secure rights. Policy recommendations also center on improvements in the implementation of land law reforms, especially when uneven implementation results in gender disparities in the issuance of land titles. A common problem across developing regions is that land titles are often distributed to heads of household only. Since the majority of household heads in most developing countries are male, this practice has led to an overwhelmingly disproportionate number of land titles allocated to men.

2. **Greater attention must be paid to customary laws:** Recommendations for policy reforms supported by literature also center on ensuring that statutory and customary laws are in accordance with legal guarantees, especially in Africa, where both customary land redistribution schemes and official land law reforms have led to reallocations that have frequently been biased against women. Government agencies have typically distributed land to household heads, a process that favors men in general and specifically the more senior men who already have power through customary land holdings. Moreover, even though government efforts to reform land laws may give female household heads the right to receive land, in practice they may not receive plots in the reallocation process when local officials redefine them as dependents of male relatives. If customary laws in Sub-Saharan countries have placed restrictions on women's access to land or prevented women from pursuing title, then these laws need to be revised so that they are in accordance with constitutional provisions that govern equality. Greater attention needs to be paid to gender relations and power structures in rural areas that disadvantage women in their attempts to own land. State-sponsored efforts to formalize property rights need to address not only customary laws and women's right to property, but also enforcement, especially in under-resourced areas.
3. **Land access for women requires innovative approaches and institutional reforms:** In addition to land titling and customary law reforms, collective approaches can also increase women's access to land. Such approaches include group investments in capital inputs, individual ownership combined with group cultivation and the distribu-

tion of group rights by governments to poor rural women. Although collective action groups can be helpful in mobilizing communities to engage in development, they do need to be monitored carefully to ensure that existing inequities are not exacerbated.

Another policy lesson relates to the dissemination of information about land reform policies and efforts to improve legal knowledge associated with land rights. Given the finding that legal knowledge is a positive and statistically significant determinant of farmers' land-related investments and land values, some researchers have argued that programs that educate households about their land rights may yield very high returns.

Finally, a key institutional reform is increasing access to credit. While reforms that promote the security of land ownership are associated with higher agricultural productivity, women may face more obstacles than men in obtaining credit. Such obstacles could weaken the potential of land titling in benefitting women. More broadly, while the evidence from empirical studies on land ownership provides a clear rationale for procedures that increase women's land ownership, the literature also suggests that such procedures would have more potent impacts if they were embedded in a framework that sought to widen the scope of institutional structures so that they assist women who live at the margin.

LAND RIGHTS AND ECONOMIC SECURITY FOR WOMEN IN VIETNAM

Nidhiya Menon, Yana Rodgers and Alexis Kennedy

Editorial Note: In this study the authors use Vietnam's 2004 and 2008 Household Living Standards Surveys (VHLSS) to analyze how land rights affect women's economic security in Vietnam.

INTRODUCTION

Vietnam's 1993 Land Law created a land market by granting households land-use rights that could be exchanged, leased, inherited, sold or mortgaged. With 11 million Land-Use Certificates (LUCs) issued to rural households within seven years of the law's existence, and a 2001 decree that stipulated that names of both husband and wife should be inscribed on the LUCs if the land was jointly owned, Vietnam constitutes an ideal test case for examining how women's economic security was affected by the creation of an asset (land) that could be traded in the market.

This research examines whether land-use rights registered in the names of both husbands and wives or wives only portray differential patterns on measures of women's economic security, as compared with land-use rights registered in the name of husbands only.

CONCEPTUAL FRAMEWORK

In principle, land rights are positively linked to household behavior through increased security of land tenure and the freedom from expropriation; greater access to credit from being able to use land as collateral; reduced vulnerability to food price shocks; and gains from trade in rental and sales markets for land. Each of these channels affects women's control over resources, with important implications for their economic security and autonomy. Higher yields due to agricultural investments, greater access to credit and gains from

trade in land markets can give women the financial capital they require to finance a host of economic activities. Moreover, some long-term investments in land may be labor-saving after the initial planting stage, with a resulting shift of labor hours into other non-agricultural activities (Do & Iyer 2008). The income generation that can result from well-defined land rights and greater access to credit serves as a viable means of incentivizing women's shift from low-paid work in marginally productive activities to remunerative work in productive activities. In this context, employment in home-based enterprises can provide women with earnings that improve their socioeconomic status and that of their households. More broadly, greater control of income by women results in changes in norms and attitudes that influence economic decisions and social behaviors within and outside of the home.

METHODOLOGY

The study uses data on matched households from Vietnam's 2004 and 2008 Household Living Standards Surveys (VHLSS). The 2004 and 2008 waves contain specialized modules on land use, with detailed information on registration of LUCs and the identity of the first and second stakeholders. In both 2004 and 2008, the full samples contain information for 9,189 households. In addition to the household data, the authors also utilized data on communes in both years for information on commune-level characteristics including geographical terrain, poverty rates, major religion, and access to roads and electrical power.

The VHLSS has panel data for a subset of households that are re-surveyed on eight measures of economic security and two measures of economic vulnerability. The economic security measures include: per capita household expenditures, two measures related to women's work for wages and/or salary, two measures related to women's self-employment, two measures related to the time that women spend performing housework, and a measure of maximum educational attainment for women in the household. The vulnerability measures are the proportion of households below the overall poverty line and the proportion below the food poverty line.

The key independent variables of interest are whether a LUC is held just by a man, just by a woman, or jointly by husband and wife. Note that jointly-held LUCs are still relevant for female-headed households since there are a small proportion of such households in which the LUC is held jointly by the female head and her husband who is present in the household. Given a history of male preference in Vietnamese institutions, it is understandable that female-headed households would seek to classify LUCs jointly. The regressions include a host of household characteristics and province-level features as control variables.

To estimate the causal impact of LUCs registered in women's names or jointly by husband and wife on the economic security measures, the study controls for selection bias—i.e., more progressive or egalitarian households are more likely to both seek joint land-use rights and have favorable indicators for women. The method of choice is a household-fixed effects model with region and time dummies and their interactions.

FINDINGS

The analysis shows that Vietnam's large-scale land titling program resulted in an increase in the share of all landowners who held land-use rights, and in joint-holdings by husbands and wives for any type of land, between 2004 and 2008. This trend is likely to benefit women and reduce disparities in power relations within and outside of the home, an argument supported with findings in this paper that land-use rights held exclusively by women or jointly by couples have, on balance, beneficial effects on measures of women's economic self-sufficiency.

Key findings on the impact of land certification from this analysis include:

- Higher household expenditures—by 5.3 percent when LUCs are held by females only and 3.6 percent when they are held by males only;

- Higher education for women, likely due to an income effect induced by the formalization of land rights; the maximum grade completed among women within a household increases by about one-third of a grade when LUCs are held by a female only and about one-fourth of a grade when they are held by a male only;
- A lower share of women who do housework in the home—by 18.7 percentage points in female-headed households when LUCs are held jointly (although there is no statistically significant effect in female-headed households when LUCs are held by females only);
- A reduction by about half an hour in women's total hours of housework per day in male-headed households when LUCs are held by females only; and
- A reduction in household poverty levels—by 4.1 percent when LUCs are held by males only and also when LUCs are held by females only.

Findings also indicate that jointly-held LUCs have strong poverty reduction effects in female-headed households. The likelihood of living below the food poverty line is also reduced by both male-only held LUCs and jointly-held LUCs. The results for women's self-employment in agriculture in female-headed households are more nuanced and depend on whether the female heads have their names singly or jointly on the land title: for jointly-titled LUCs in female-headed households, there is a 6.8 percent decrease in the proportion of women self-employed in agriculture, again likely due to an income effect, and no impact where LUCs are held by females only.

The study's small sample size for female-headed households prevented the precise measurement of the impact of female-only or jointly-held LUCs on many of the indicators of women's economic security. In some cases, the lack of beneficial effects is also informational. For example, LUCs in women's names are not found to be helpful for women's self-employment in non-agricultural activities. To the extent that non-agricultural entrepreneurial activities require start-up capital, this result suggests that issuance of LUCs did not improve women's access to credit in a substantive way.

CONCLUSION

Results indicate that on balance, land rights held by women either exclusively or jointly by couples improve their economic freedom with increases in household expenditures and education for women, and declines in the daily hours of housework and the number of women engaging in housework. In terms of vulnerability,

land rights held just by women, by men only, or jointly reduce the incidence of poverty among households.

The lack of beneficial effects of female- and jointly-titled LUCs across several of the measures of economic security and vulnerability suggests that simply issuing land-use rights by itself is not sufficient to guarantee improvements for women. Reforms also need to encompass institutional changes such as easier access to credit markets, fewer gaps in the social safety net, and changes in cultural attitudes against women in order for land rights to have meaningful impacts.

What do these measures of economic security and household vulnerability mean for women's empowerment? The results for women's relative status suggest that land-use rights in women's names do indeed strengthen women's bargaining positions, thus providing a clear rationale for strengthening procedures to encourage women's titling to land. However, such procedures would have more potent impacts if they were embedded in a broader framework that sought to change existing institutional structures that currently disfavor women.

GOOD AND EFFICIENT? WOMEN'S VOICE IN AGRICULTURE

Ralitza Dimova and Ira N. Gang

Editorial Note: In this study the authors use the Third Integrated Household Survey (IHS3) of Malawi to analyze whether female cash crop decision-making has positive impacts on both efficiency and welfare.

INTRODUCTION

Throughout Sub-Saharan Africa, lucrative cash crops are typically perceived as “male crops,” while lower-value crops for home consumption are perceived as “female crops.” However, the potential of engaging female agricultural producers in high-value crop activities has been an increasing focus of much of the recent development literature and policy discourse, the assumption being that women cultivating “male crops” not only bolsters women's economic empowerment, but also improves overall household welfare. While we know that significant barriers, such as a lack of access to production inputs and technology, prevent women from cultivating high-value crops, we know less about the consequences of interventions that would remove these barriers and allow women to cultivate more lucrative cash crops. Using a representative household survey from Malawi, this work draws a profile of successful women farmers, and the policies and interventions associated with this profile. The study finds that female cash crop decision-making has positive impacts on both efficiency and welfare. Female cash crop decision-making is encouraged by female ownership of land, credit allocations to women, and village-level infrastructure (development agencies, credit unions, etcetera).

CONTEXT

Malawi is one of the poorest countries in the world and is predominantly agricultural. It shares key character-

istics with many other poor tropical African economies, namely a comparative advantage in cash crop activities,⁹ and it is threatened by food insecurity—especially in an environment of rising food prices and potential drought. While farmers engaged in subsistence agriculture have typically been shown to restrict themselves to low-risk and low-return activities, there are significant entry constraints facing smallholders in pursuing more lucrative agricultural activities. Entry barriers to high productivity activities are found to be greatest for women. Specifically, exclusionary land ownership patterns, lower access to extension services, limited ability to acquire inputs, and a lack of access to credit have been identified as the four most important barriers to female empowerment in Malawi's agricultural sector.

METHODOLOGY

This empirical analysis uses the Third Integrated Household Survey (IHS3) of Malawi, conducted between March 2010 and March 2011. The survey is representative for the entire country, and was conducted by the National Statistical Office of Malawi, which received technical assistance from the World Bank as part of the World Bank's Living Standards Measurement Study (LSMS). After accounting for missing observations and other data inconsistencies, the analysis included a total household sample of 10,401 observations. The authors restricted the sample to those households that had access to land and derived income from agricultural production in the reference period, leaving a sample of 10,085 observations.

9 Most importantly tobacco, but also more traditional commercial crop activities such as groundnuts, cotton and hybrid maize.

The survey is incredibly rich. Aside from the usual LSMS household and individual-level questions aimed at assessing expenditure, household income, labor force characteristics, education, and social assistance, the survey contains a separate section on agriculture. It is not only possible to identify the different crops produced and the inputs and outputs from the production process; it also includes information on which household member is responsible for which activity, who owns the land used in agricultural production, and who is responsible for the allocation of earnings derived from each activity. In addition, the survey contains useful information on various interventions. This data was of particular importance to the analysis, as it allowed the authors to identify the person in the household towards whom the intervention was directed. While there is certainly not a one-to-one correspondence between the survey responses and various policy interventions, the intervention programs do link somewhat naturally to the nature of the interventions perceived by respondents.

The study addresses three related questions: a) are high value cash crop activities of women more welfare-enhancing than subsistence agriculture; b) if so, how do alternative interventions influence women's involvement in high value crop production; and c) which interventions are most effective in reducing women's access barriers and enhancing their agricultural productivity?

Using stochastic frontier analysis—a popular technique for assessing agricultural productivity—the authors explore the efficiency-enhancing impact of government and institutional/social interventions designed to remove barriers to women's entrance into high-value agriculture. As is common in frontier analysis, the authors use variables, such as those capturing cooperative village arrangements and proxies of government policies, to explain the (in)efficiency parameter of the production function estimate. The analysis assesses the effects of these interventions on productive efficiency in agriculture, as well as the effects of institutional factors (such as land ownership), and female decision-making in cash crop production, comparing the results for male and female-headed households.

The authors follow the efficiency analysis with a Heckman-type treatment model, accounting for the non-random selection of individuals into an activity, in order to test the null hypothesis that the entry of women into cash crop activities is more welfare-enhancing than reliance on subsistence (food crop) agriculture. In addition, the authors attempt to create a profile of the

characteristics of women who undertake high-value agriculture and which policies/interventions are associated with this involvement.

RESULTS

Overall results indicate that female cash crop decision-making is good for efficiency and welfare. In fact, the analysis finds that while female agricultural decision-making generally (without allowing for control over resources derived from agricultural production) lowers welfare, female cash crop decision-making raises welfare. This brings in an important policy dimension to the recent debate on the benefits of movement from cash crop into food crop activities in the context of food crises and chronic food insecurity in developing countries.

Despite some controversies in the literature on *de facto* matrilineal versus patrilineal land ownership, the analysis indicates that the *de jure* female ownership of land has a strong positive effect on female involvement in agriculture. However, female ownership of land improves productive efficiency only in female-headed households, and even there the effect disappears after controlling for other efficiency-enhancing variables. In other words, the results indicate that there is scope for efficiency and welfare-enhancing policy interventions that go beyond and countervail deeper-rooted institutional factors. The strongest of these efficiency-enhancing interventions across different types of households (female or male-headed) is the presence of overall village development association. The results are more controversial insofar as coupons and extension services are concerned. Coupons improve efficiency only of male-headed households, while extension services in fact deteriorate the efficiency of female-headed households.

EFFICIENCY

In the whole sample, a woman being a commercial/cash crop decision-maker has a strong efficiency-enhancing effect, though the opposite is true for land ownership. While owning land promotes female decision-making in cash crops, for efficiency, it only matters if the female is also a head of household. In contrast, among female-headed households it doesn't matter whether a woman makes cash crop decisions, but female ownership of land has a strong positive impact on efficiency.¹⁰ Hence, if it is a non-female-headed household and a woman owns the land, it has a deteriorating effect on efficiency, as the male spouse has less incentive to use the land efficiently. Once we

¹⁰ This is consistent with the other studies, which have found that males in matrilineal settings do not have incentives to invest in agricultural production.

include policy variables, the effect of both land and female decision-making in crops disappears; policy can counteract other household effects.

The receipt of coupons for the purchase of either seeds or fertilizers has a significant efficiency-improving effect in male-headed households, and an insignificant effect in female-headed households and the overall sample. When coupons were directed to poorer households, such as those headed by females, bartering might have taken place to alleviate immediate consumption constraints. Extension services have a small efficiency-deteriorating effect in the female-headed sample, perhaps due to time allocation issues. Among the village-level variables, the strongest efficiency-enhancing effect comes from village development institutions. These form the catalysts through which cooperative action in the community occurs. In the case of the overall sample and the male-headed sample, agricultural cooperatives have an efficiency-deteriorating effect.

WELFARE

Not only do women as cash crop decision-makers improve household welfare, but women as cash crop producers and sole household decision-makers on what to do with the earnings amplify this positive effect. The results are less robust among women as food producers or as producers of anything other than cash crops, which strengthens the call for women to shift toward cash crops.

Female land ownership has a strong positive effect on women making cash crop decisions. The allocation of credit to women has a strong positive impact of female allocation into cash crops and the opposite is true for credit allocated to men. Village development agencies, savings and credit unions, and female groups have strong positive impacts on female participation in cash crops. Insofar as household variables are concerned, female-headed households are more likely to be involved in cash crop production; the same is true for polygamous families, but not monogamous ones. Education has a strong positive impact on women becoming cash crop producers. As for understanding the impact on welfare as measured by household per capita consumption, high dependency ratios negatively impact welfare; female-headed households expectedly have lower welfare; marriage is bad for welfare (whether monogamous or polygamous). Education is good for welfare.

POLICY IMPLICATIONS

A key policy determinant of female involvement in high-value agriculture is the presence of village-level infrastructure, especially village development agencies and savings and credit unions. However, for improving efficiency and promoting the movement of women into cash crops, different policies matter. For getting women into cash crop production, it is also important to promote the provision of loans to women, the allocation of land to women, increasingly efficient policies related to input subsidization and extension services, and increased financial deepening.¹¹

11 But these matter more for women in cash crop decision-making than in other forms of agricultural decision-making.

“YOU CAN’T EAT COTTON”: EVIDENCE ON CROP PORTFOLIOS AND GENDER FROM BENIN¹²

Markus Goldstein, Karim Mchich, Joao Montalvao, Ana Maria Munoz Boudet, Michael O’Sullivan, and Beth Zikronah Rosen

Editorial Note: In this study the authors use quantitative and qualitative data from Benin to analyze reasons for gender differentials in how farmers sort into different crop portfolios.

INTRODUCTION

In sub-Saharan Africa, women are often viewed as being responsible for food crops for household consumption, while men are responsible for cash crops for household income (World Bank 2012). A shift in production from food crops to cash crops is potentially very attractive, because cash crops generate additional income that allows farmers to purchase both food and non-food consumption goods (Maxwell and Fernando 1989). The concentration of women in food crops has led to thinking that female farmers are less present among cash crop producers because they face greater constraints to the adoption of such crops than male farmers.

However, this traditional distinction between male and female crops does not seem to reflect the reality on the ground. For example, Doss (2002), tries different methods for assigning crops by sex of the farmer, and concludes that most crops in Ghana cannot be neatly categorized by gender. One drawback of studies that narrowly focus on the male-female crop distinction is that they appear to ignore the fact that individual farmers choose portfolios of crops, not crops in isolation. This paper contributes to this literature by empirically examining whether and how the market orientation of a crop portfolio varies with the gender of its farmer.

Using a recent cross-sectional dataset of Beninese farmers, the authors start by uncovering a strong pattern among male farmers. Specifically, they show that whereas many of them grow basic staple foods, such as maize and cassava, in isolation, they rarely put all their eggs in the cash crop basket. That is, those who grow cash crops, such as cotton or palm oil, mostly do so together with basic staple foods.

Since cash crops are known to be inherently riskier than food crops (e.g., Ashraf et al. 2009), the authors interpret this pattern as a symptom of imperfect insurance markets (e.g., Fafchamps 2003, 2010). This is because under such market failure, substituting sub-

sistence with cash crop production may jeopardize the farmer’s food security (Rosenzweig and Binswanger 1993; Morduch 1990). As a result, a farmer is more willing to grow cash crops, such as cotton or palm oil, if he or she can first ensure food self-sufficiency.

Naturally, however, in order to grow multiple crops on a given farm, farm size matters – a constraint that is particularly taxing for female farmers. Both in this data set and in most of the developing world (Doss 2001; Morrison et al. 2007; World Bank 2012), female farmers are found to have far less access to land than male farmers. Based on this observation, the authors then convincingly show that relative to male farmers, female farmers tend to specialize in single-crop portfolios because they are in charge of much smaller farms.

Interestingly though, despite the disproportionate land constraints faced by female farmers, the authors show that female farmers do not completely forego market opportunities. Instead, they are found to specialize in the production of crops that, though edible, still have local market value, such as vegetables and nuts. By growing these “dual” crops, female farmers can still reap the potential benefits from agricultural markets without completely risking their food needs.

The contributions of this paper are twofold. First, the authors go beyond the simple detection of a gender differential in how farmers sort into crop portfolios, and provide a clear rationale for why such a differential exists. Second, they uncover an important economic implication of the persistent gender inequality in access to the most fundamental agricultural input, land. For the first time, the authors examine how gender inequality in access to land affects gender differences in crop portfolio choices.

DATA

This study draws on both quantitative and qualitative data sources to examine women’s and men’s agricultural crop portfolio choices. At the quantitative level,

the authors exploit a large rural household farming survey that was conducted for a randomized impact evaluation of a rural land formalization program in Benin (Goldstein et al. 2013). These data were collected across 289 villages in a total of 3,507 households, with detailed information collected on 7,422 farm plots used by these households. The sample includes 2,811 individual farmers, 500 of whom (18%) are female.

The quantitative data was complemented with qualitative fieldwork to both provide support to the quantitative findings, as well as to uncover otherwise unobserved constraints limiting women into cash crop adoption. The qualitative team conducted a total of 95 semi-structured interviews with female farmers both cash and non-cash crop producers, 20 interviews with male partners of female cash crop producers, and six key informant interviews with female farmers' clients and suppliers of seeds and other inputs. They also held focus groups with male farmers who grow cash crops. Finally, the team ran further focus groups in each region with a mix of female farmers who produce both cash and non-cash crops in each region.

CROP PORTFOLIOS

The quantitative data starts by challenging two commonly accepted notions in agriculture in developing countries. First, it provides evidence against the idea that males specialize in higher value, more market-oriented crops, while women specialize in lower value subsistence crops. For example, yams, which are disproportionately grown by male farmers, also appear to be very valuable, yet only a small fraction of their output is sold in the market. On the other hand, tomatoes and peppers, which are grown by a substantial fraction of female farmers, appear to be both relatively valuable and highly marketable.

Second, the data cast a shadow over the conventional perception that a crop is either grown exclusively for the farmer's household consumption or for sale in the market. Instead, the authors show that farmers sell all crops, though in very different proportions. For example, a non-trivial share of the production of cereals and tubers – including maize, Benin's principal food crop – is sold in the market, though most of it is consumed by the farmers' households. Nuts and vegetables, especially tomatoes and peppers, appear to be sold in the market in larger proportions, though they are also

consumed within the household. As for two of the major export crops in Benin, cotton and palm oil, we can see that, as expected, nearly all of the cotton production is sold, and that a sizeable fraction of the palm oil output is processed, likely before being channeled to market outlets.

Based on this evidence, the authors then organize the crops observed in the data into three broad categories. First, food crops are produced for household consumption. These are cereals, consisting of maize, sorghum, and rice; and tubers, comprised of cassava and yams. Second, dual crops are produced for both household consumption and for sale in local markets. These are tomatoes, peppers, peas, beans, soybeans, cashews and peanuts. Third, cash crops, which are essentially produced to be sold in local and export markets. These are cotton and palm oil.

From these three types of crops, seven mutually exclusive crop portfolios were constructed. On one hand, there are single crop portfolios (specialized) which either comprise (i) food crops only, (ii) dual crops only, or (iii) cash crops only. On the other hand, there are multi-crop portfolios (diversified) that can either comprise (iv) food with dual crops, (v) food with cash crops, (vi) dual with cash crops, or (vii) all three combined. Empirically aggregating individual crops into crop portfolios is consistent with the decisions that farmers face in real life. A farmer's decision to cultivate a particular crop is not independent of the crops that he or she is already growing or is planning to grow.

MALE AND FEMALE FARMERS CHOOSE DIFFERENT CROP PORTFOLIOS

Table 1 reports the distribution of these seven portfolios separately for male and for female farmers. Columns 1 and 2 report the fraction of male and female farmers growing each portfolio respectively. Column 3 estimates the corresponding gender differential in the adoption of each crop. Column 4 in turn reports these same estimates while controlling for village fixed effects. Doing so will purge gender differentials in crop portfolio choices due to village level factors that may be simultaneously correlated with, for example, the proportion of female farmers in a given village or the distribution of crop portfolios in that same village.

TABLE 1: DESCRIPTIVE STATISTICS ON CROP PORTFOLIOS

Means, standard deviations reported in parentheses, standard errors reported in brackets.

	MALE FARMERS (1)	FEMALE FARMERS (2)	OVERALL (3)	WITHIN VILLAGE (4)
Specialized Portfolios				
Food Crops	.553 (.497)	.580 (.494)	.027 [.028]	.049* [.029]
Dual Crops Only	.056 (.230)	.136 (.343)	.080*** [.018]	.063*** [.021]
Cash Crops Only	.020 (.140)	.024 (.153)	.004 [.007]	.008 [.008]
Diversified Portfolios				
Food+Dual crops	.257 (.437)	.232 (.422)	-.025 [.023]	-.073*** [.025]
Food+Cash crops	.088 (.284)	.020 (.140)	-.068*** [.012]	-.040*** [.012]
Food+Dual+Cash crops	.026 (.159)	.008 (.089)	-.018*** [.006]	-.022*** [.007]
Specialized portfolio (any one of specialized portfolios)	.629 (.483)	.740 (.439)	.111*** [.026]	.120*** [.027]
OBSERVATIONS	2,310	500		

Notes: *** denotes significance at the 1% level, ** at the 5% level, * at the 10% level. For each row, the differences reported in Columns 3 and 4 are obtained from an OLS regression of the corresponding crop portfolio on a dummy that is equal to 1 for multi-crop farmers, and 0 for single-crop farmers. Column 4 further controls for village fixed effects. All regressions cluster the standard errors at the village level. Basic food staples include maize, sorghum, rice, cassava, and yams. "Dual" crops include tomatoes, peppers, peas/beans, soybeans, cashews, and peanuts. Cash crops include cotton and palm oil.

This table shows that the majority of farmers, regardless of their gender, specialize in the production of food crops. Specifically, 58.0% of male farmers and 55.3% of female farmers adopt this portfolio. Column 4 suggests that female farmers are slightly more likely than male farmers to adopt this portfolio, though only marginally significantly so.

The second most common portfolio for both male and female farmers is the combination of food with dual crops. However, male and female farmers are not equally likely to grow this portfolio. Indeed, 25.7% of male farmers grow this combination of crops, whereas female farmers are 7.3 percentage points less likely to do so within a given village, and this difference is statistically significant.

Female farmers appear to compensate for this differential by growing dual crops in isolation. In fact, this portfolio is the third most popular among females, with

23.2% of them growing it. Within a given village, males in turn are significantly less likely (by 6.3 percentage points) than females to do so.

The third most common portfolio for male farmers, at 8.8%, is to combine food crops with cash crops. Again, a significant gender differential holds regarding the adoption of this portfolio. The typical female farmer is 4 percentage points less likely than a male farmer coming from the same village to grow this portfolio.

Finally, growing cash crops in isolation does not appear to be a very popular strategy. Only around 2% of male and female farmers do so. Moreover, a fully diversified portfolio, which includes food, dual, and cash crops, is a very rare event, especially among female farmers.

Taken together this evidence suggests that male farmers give priority to food crops, being willing to grow more market-oriented crops if they can do it together with food crops. Female farmers also give priority to food

crops, but they seem to be more prone than male farmers to grow crops that though appropriate for household consumption can also be sold in local markets.

WHY THIS GENDER DIFFERENTIAL IN CROP PORTFOLIO CHOICES?

Having learned that males and females grow different crop portfolios, the authors seek to understand why. Specifically, what is it that male farmers have that female farmers do not have, or vice versa, that ultimately drives this gender differential in portfolio choices? While trying to answer this question, a striking gender differential in farm land size emerged from the data. Within a given village, female-managed farms were found to be around 75% smaller than male-managed farms, and highly significantly so.

Could this gender differential in access to the most fundamental and primitive agricultural input account for the observed gender differential in crop portfolio choices? Given the earlier evidence suggesting that land constrained farmers give priority to food crops, the authors hypothesized that this could indeed be the case, and this hypothesis was robustly borne out by the data.

Indeed, the observed gender differential in crop portfolio choices vanished once the authors controlled for farm land size. That is, if female farmers were given farms as large as those of male farmers, they would grow crop portfolios similar to those grown by male farmers. This result is robust to controlling for a wide range of farm level and farmer level background characteristics, suggesting that the effect of farm land size is not capturing observable gender differences in farm level and farmer level factors that are simultaneously correlated with farm land size and crop portfolio choices.

RISKY BUSINESS

Cash crops are a risky business. With imperfect insurance markets, male cash crop farmers appear to hedge this risk by also growing food crops that can be consumed by their households. Crop portfolio diversification in this way however requires access to sufficient land, something that female farmers are clearly disadvantaged in relative to male farmers in Benin. As a result, female farmers in this study were found to be more likely than male farmers to specialize in the production of less market oriented crops.

The quantitative findings that male and female farmers grow different crop portfolios because females

face much stronger land size constraints were borne out by evidence collected during the qualitative fieldwork. Access to land was described as a challenge by the female farmers interviewed, which was explicitly connected to their crop portfolio choices. The qualitative evidence also supported the idea that the underlying problem was one of insurance against risk. Unless they also grow edible crops, cotton growers must rely on the vagaries of food markets since, as a female cotton producer cautioned, “[t]here is nothing else you can do with cotton; you can’t eat it.”

In addition to access to land, the qualitative research revealed a potentially compounding constraint: access to sufficient labor. Farmers growing a variety of crop portfolios acknowledged that one of the key constraints female farmers face was a lack of workers. Furthermore, the workers they were able to recruit were often unable or unwilling to provide the required labor in the optimal time frame, and tended to be unreliable and difficult to supervise. Because more market oriented crops tend to be grown on larger land holdings, which generally require more labor, the problem could potentially also contribute to the observed gender differential in crop portfolios choices.

As Quisumbing and Pandolfelli (2010) and Gelb (2001) note, women are constrained in the amount of time they can spend on agricultural labor and other economically productive activities, largely due to the unequal burden for domestic and family responsibilities that women bear. One female farmer in the qualitative sample explained that, “Those who are married, for example, cannot go very easily into their [agricultural] operations because they must first take care of their husbands and their children.”

However, the quantitative data revealed that female farmers were more likely than male farmers to come from smaller households with fewer adult men. This in turn likely forces females to rely more heavily on farm workers from outside the household, should they wish to increase their production scale. Hiring paid labor may be required, but this requires a financial investment that presents an additional barrier. Part of the problem is that farm workers, both hired and within the household, tend to first work on male-managed plots and are not available for female-managed plots until after.

Labor supervision is especially challenging for female farmers, who complain that workers do not work as diligently on their plots. Although external labor typically comes with greater supervision costs (Feder 1985),

this problem is not necessarily solved by using household labor, as one cotton farmer explained. Husbands, in her view, “do not do as good a job treating our [women’s] fields. Especially when I see the cotton field that my husband has and compare it to mine, I think he did not treat my field. And when I asked him if he treated my cotton we argue and he says that it is not my problem, it is not for me to say.”

POLICY IMPLICATIONS

On the land side, policymakers should continue to secure land titles and land rights for women. When it is not possible to integrate formal legal land tenure with customary land systems equitably, actions to help women bypass customary law and directly obtain access to land via formal land markets should be taken. For example, promoting land rental and sales markets, as well as the creation of land banks, could be viable policy options. Initial results from the impact evaluation of Benin’s rural land certification program offers some promise in this regard. The program, which offers community surveying and the issuance of land certificates to formalize rural land rights, actually induced female-headed households to get more involved in the purchase and renting of land relative to male-headed households (Goldstein 2013). Holden et al. (2007) document an increase in land rental by female heads of household following a community land registration process in Ethiopia. Quisumbing and Pandolfelli (2010) argue that land rentals may be better in terms of social norms barriers to female farmers, based on an experience in Burkina Faso where emerging land markets created incentives for male land owners to lease excess land to women (because they are less likely to claim rights to the land they are cultivating), and showed that husbands were also more supportive of their wives when it came to land rentals.¹³

In addition, making available pooled parcels of decent quality land to women’s farming groups (with a strong emphasis on individual incentives) may also help encourage female smallholders to diversify their crop portfolios and enjoy added revenue streams. Potential vehicles for this latter solution include either forming women’s cooperatives or perhaps incentivizing policymakers to create land banks. Land banks could operate as formal institutions where individuals can ‘deposit’ land to be rented out to farmers. Land owners at the community level as well as local governments can in this way obtain returns for land currently under-exploited or not being farmed while allowing for individuals, including women, with limited access to land to profit from its exploitation (Aryeetey and Udry 2010,

and Udry 2011). According to Aryeetey and Udry (2010) one of the most important features of land banks is that they can “facilitate the consolidation of plots for relatively large scale commercial projects...This provides an additional margin for a land bank to improve the efficiency of allocation.” Land banks can also serve as a way to resolve conflicts over ownership, and separate property use from ownership rights, (Udry 2011) something extremely important for women who, as our qualitative data showed, have largely use rights over legal rights on the land they farm.

On the insurance side, more work needs to be done to better understand female farmers’ risk coping mechanisms, in particular when it comes to food and income security. Recent work by Cole, Gine, and Vickery (2013) on insurance against exogenous production risks such as rainfall demonstrated that a fully subsidized index insurance product, which avoided problems of adverse selection and moral hazard, shifted Indian farmers toward riskier cash crops and led them to boost investment. In line with this idea, recent evidence from Mobarak and Rosensweig (2012) in India, Karlan et al. (2012) in Ghana, and Cai et al. (2012) in China, also show that credible insurance arrangements can have significant impacts on production choices and risk-taking. While none of the above papers provide gender disaggregated results, index insurance products could be a model worth testing further, with women as targets, in Benin or a similar country in sub-Saharan Africa.

Addressing women’s “time poverty” could enable them to use more of their own labor on their farms, making them less reliant on problematic household and outside labor. Quisumbing and Pandolfelli suggests improving access to time-saving technologies, while taking into account “culturally permissible roles for women” to encourage uptake, could be an effective way of reducing women’s time constraints, improving their productivity, and freeing them to engage more in economically productive activities (Quisumbing and Pandolfelli 2010). Though more research is needed, some studies have suggested that improving childcare options for mothers in the region could also help to decrease the burden of domestic responsibilities and improve their economic outcomes. A randomized impact evaluation in rural Mozambique, for example, found that with access to childcare, the probability that a caregiver reported working in the past 30 days increased by 6.2 percentage points, representing an increase of 26 percent over the control group (Martinez 2012). Packaging childcare into extension services for farmers might be an innovative ways to address this

13 For more details see Bruce, J. (2006). Land law reform: Achieving development policy objectives. Law, justice, and development series. Washington, DC: World Bank Publications

constraint, though further research is recommended to investigate the impact of access to childcare services on farming activities. Additional research on ways to improve women's access to sufficient and quality labor is also recommended, both in terms of intrahousehold allocation of labor (Doss 2013) and on the ways to address gender-based norms (Quisumbing and Pandolfelli 2010).

By tackling these issues and addressing female farmers' key constraints around land, risk, and labor, women will be better empowered to diversify their portfolios to include more marketable and valuable crops. This

may encourage more women to follow the path of a female cashew farmer, who pointed to her increased empowerment and financial independence, saying, "I spend as I want. My children and I are comfortable. There is peace in my home, because when you ask for money from men and they do not want to give it to you, it creates a problem." This sentiment was echoed by another female farmer, who proudly explained, "If you are owner of palm, all your problems can be solved with this crop. Even if you die, your children will operate the palm to book you a funeral worthy of your rank."

WOMEN'S ECONOMIC EMPOWERMENT IN AGRICULTURE: SUPPORTING WOMEN FARMERS

Cheryl Doss, Zoe Bockius-Suwyn and Shereen D'Souza

Editorial Note: The authors report on information they have collected via project documents and interviews with practitioners on 34 good practice projects in agriculture that benefit women farmers.

INTRODUCTION

Women play an integral part in agricultural production, as subsistence farmers, cash crop growers, food processors, and livestock owners, among other roles. Recently, many development organizations have begun to integrate gender into their agricultural development projects. While this recent generation of projects is too new to provide rigorous evidence on the long-term impacts of targeting women in agriculture, this paper seeks to identify interventions that are having operational success on the ground. Drawing on a range of experiences from current interventions, this paper seeks to identify strategies that are most effective in targeting women and that have the potential to economically empower women in the agricultural sector.

METHODOLOGY

The authors contacted over 100 researchers and practitioners and identified 34 projects to serve as case studies. The authors then interviewed people involved with each project to learn their perspective on what types of interventions are working. The interventions fell into three types: those targeting food security, those looking to engage women in economic structures and agricultural markets, and those seeking to increase women's rights as a means of increasing economic power.

FINDINGS: INTERVENTIONS THAT WORK

Inputs: Recent years have seen a shift from food provision to agricultural input provision in areas that are food insecure or economically underperforming. By providing these inputs, organizations are able to assist women in the first steps of empowering themselves, either through starting businesses or ensuring the food security of their families. Effective inputs include livestock (especially small livestock such as poultry), tree and shrubbery seedlings, and new seed varieties.

There are several methods for providing the inputs discussed above. Some organizations provide the inputs in exchange for training attendance. However, this method is becoming less prominent in the field, with conditional provision becoming more common. Conditions can take the form of loans (such as savings-matching loans or loans-in-kind) or the expectation of a "rotating gift." A common theme in all of these distribution strategies is the importance of making inputs available locally, either through distribution at training sessions and organization-run local distribution centers, or through forging deals with local businesses. In the case of seed and planting material, community seed banks, community seed networks, and community nurseries are common forms of propagation and distribution.

Technologies: Technologies that work best for women address the time and cash constraints that women

face. While many technologies, such as irrigation systems, fertilizer and herbicide methods, and greenhouse structures, may increase productivity, they may also require initial cash investments or increases in women's labor. Technologies that may be labor-saving in arid regions include water catchment systems and irrigation systems, which cut down on the amount of time women spend fetching water. Pesticides, herbicides, and fertilizers are also popular technologies to save women time and produce better yields. In the same way poultry rearing fits well with women's schedules and constraints, there are certain technologies that work well for women. For example, beekeeping and honey production can be made women-friendly with the use of artificial bee boxes, replacing the use of natural beehives that are formed in trees. Similarly, in communities with limited land, women can use small-scale silage making technologies, or plastic storage tubes and boxes, to collect grasses from surrounding public lands to use as cattle feed, freeing up their own limited land to grow other vegetables.

Processing and Storage: Processing and storage technologies are important in both food security and income generation via agriculture. These technologies are the crucial step between harvest and sale, or between harvest and consumption, lessening wasted or ruined product in either scenario. Improved processing machinery can help women save food for the lean season, work up higher in the agricultural value chain when land is scarce, and reduce drudgery in the household. In some cases, a processing center can create a group structure, serve as a social center, or act as a location for trainings and health services. Processing technologies are also most effective when paired with trainings on marketing strategies, pre-packaged brands, or established market connections. Additionally, the storage of seeds in seed banks, through drying processes, and in storage bags, can ensure agricultural sustainability. While storage techniques and equipment are easier to distribute at the individual level, projects that seek to improve processing techniques are more effective when the intervention works in a group setting. Projects may be able to facilitate women acquiring processing technology or equipment. However, issues of geographical convenience and technology training are barriers to engaging women in such activities. By providing more convenient technology and better training, the sector holds much potential.

Extension: While extension was the most widespread of the interventions used among projects included in this study, research suggests that many women are excluded from extension services. Therefore, while type of extension is important, the style of delivery, includ-

ing place, time, extension officer, and materials used, are all very important in determining how accessible extension programs are to women.

Extension programs usually focus on one of three themes: agricultural techniques, social empowerment, or business training. While topics for trainings vary by region and crop type, the most effective agricultural extension programs instruct women on how to use newly-introduced technology and inputs. While agricultural methods are the traditional topic of extension programs, most projects that target women have integrated social training into extension; gender trainings are a popular subject, as are conflict resolution, leadership, and business training. An effective extension network can take several forms, ranging from a small group of highly trained officers that travel to deliver trainings, to locally-based agents who live with the people they serve. Some programs work within existing government extension networks and others create their own, depending on factors such as levels of government corruption. Extension programs must be adjusted to best serve women, and helpful features include convenient training times and locations, sincere efforts to invite women, offering child care, and interactive training modules. In addition, social and business trainings can be just as important as agricultural training in increasing women's economic empowerment in agriculture. Trainings tend to work better when community members are comfortable with extension workers, which can be accomplished by using community volunteers, women, youth, or trainers who live in the area. Exchange visits between communities to share knowledge and experience are also important tools for introducing and sustaining better agricultural practices. Agricultural trainings that are sensitive to current agricultural methods in project areas and enact change through showing rather than telling tend to be the most effective.

Access to Credit, Savings and Financial Services: Credit, savings and loans play a significant role in creating long-term achievements for women in the agricultural sector, and were provided or encouraged by the majority of projects in this study. As with other systems of input or extension, using groups as a forum for delivery was a common theme in the projects. Groups can provide peer responsibility for repayment, in lieu of individual collateral, as well as a support system for saving money. The form of such microfinance institutions varies depending on the goals of the project, with formal and informal methods each having their advantages and disadvantages. However, there are common lessons to be learned. First, loans are most effective with encouraged savings programs, especially

for women who do not have assets to use as collateral for formal loans. Second, if a project is working with households as a unit or with farms as a family business, it is important to encourage transparency about loans within the family, with the goal of empowering women to use the money loaned in the way she planned. Third, agricultural loans often do not follow the same rules as small business loans since they are dependent on weather, seasons, and uneven cash flow. Adapting loans to best work with local conditions and local preferences can improve repayment rates, making both the lending institutions and the participants more successful. Fourth, loans work better when coupled with financial literacy and business education as well as trainings on how to use new inputs or technologies in which women can invest. In fact, loans work best when integrated into a holistic approach, such as the approach used by BRAC Uganda.

Land Rights: Securing women's land rights may also be key to increasing agricultural productivity and ensuring that women reap the benefits. A number of projects specifically target female land ownership and legal structures. Two lessons emerged from interviews of projects with this focus. First, community education, including the education of both women and men, as well as local leaders, is paramount. Community education on women's property rights is an important step in changing discriminatory cultural attitudes and practices and creating a sustainable community structure to support women's rights. Second, it is important to establish the necessary community-based legal support structures for property disputes, including watchdogs and paralegals. By training community members to be watchdogs that oversee property disputes and paralegals that assist women in property disputes, projects ensure that women have the tools they need to ensure their rights. In addition to often-contradictory formal laws and customary laws, women play different roles in the agricultural economy, so emphasis on local context is crucial. Finally, in implementing land rights projects, it is important to not only ensure women's legal access to land but to also ensure a woman's ability to use the land in an effective and lucrative way.

Market Access: Market access is a crucial part of any income-generating project for women. While smallholder farmers already struggle to obtain sufficient market access, in many areas women are even less likely to have access to local, regional, and international markets. In order for projects to make a significant impact, they must address the potential outlets for products and teach women the marketing skills necessary to negotiate sales. Many projects take this one step further

by doing larger value chain analyses. This involves considering market access not just as a way to sell output, but also as a means of purchasing inputs and creating specialties in order to corner niche markets. By making smallholder farmers significant players in the market, projects stimulate income generation, empower women farmers, and create mutually beneficial relationships between farmers and buyers. The use of farmers' groups is a common tool in linking small farmers to the market. Groups can also be used to pool resources with the goal of creating marketing strategies, reaching a variety of buyers, and making technology available to members. Groups can also assist smallholders in accessing markets—projects can do this by directly negotiating or creating buyers, teaching beneficiaries how to negotiate, or creating more local markets for beneficiaries.

Integrated Approaches: The trend of increasingly integrated projects is important. An equally important trend is that of projects seeking to have multiple impacts from one intervention. The factors driving this shift to integration are twofold. First, women often have more to gain from these integrated approaches, which incorporate life skills such as nutrition education, literacy training, financial education and social empowerment. Second, integrated projects tend to be more efficient, either using the same extension system and support network to deliver multiple trainings and inputs or affecting several aspects of community life through a single intervention. Integrated approaches take many forms, but have the common characteristic of attempting to create comprehensive change in agricultural communities. Given the diverse roles that women play in communities and families, as well as the multiple and overlapping forms of disempowerment they face, integrated projects tend to especially benefit women.

Adaptation to Climate Change: The impacts of climate change compound the challenges women agriculturalists face in the developing world. Projects found that certain inputs can cheaply and simply facilitate women's climate change adaptation. Such strategies include the use of farmers' groups, a focus on integrated projects that include trainings in subjects such as business and nutrition, encouraging participation in savings and loans programs, and an emphasis on building women's leadership. Most projects also relied on input distribution as the basis of the intervention, with inputs tailored to adaptive strategies that work well for women. The field leaves room for much research and innovation on what other types of inputs can work.

Women's Formal Employment: The importance of making projects accessible to women extends beyond the convenient training times and childcare provision described above in the extension section. Making a project accessible to women, as well as creating sustainable changes in a project's gender strategy, requires the employment of women, especially in positions that come into contact with beneficiaries, such as extension officers.

Women's Informal Leadership: Women's leadership in non-employment settings can be more important, and perhaps more feasible, than formal employment of women. Female leadership in farmers' groups, in village-level governance structures, as "lead" farmers in extension models, and within families is necessary for gender and agricultural development benefits to occur. Women's leadership can come in many forms, but in the projects interviewed generally fell into one of two categories: leadership for policy advocacy and leadership in farmers' groups. For instance, some projects employ female extension officers and use women volunteers as "lead" farmers that train other women.

Policies and Institutions: The importance of the policy and institutional landscape in which an intervention operates was a common theme in the data. Policy, including specific national laws that relate to female ownership rights and general national sentiments towards female empowerment, can affect the extent to which targeted communities participate in project activities. National land tenure laws for women can greatly affect project success. In addition to general policy regimes, politics and government institutions can influence interventions more directly. Several projects worked directly with government agencies to implement projects. Finally, political and legal environments can make or break a project, but prescriptions for dealing with such are not easy to formulate as they differ by local context.

CONCLUSION

The challenges facing women farmers continue to be the same ones that practitioners and academics have identified for years. Two key lessons are driving the current promising approaches. The realization that women were important in agriculture led to projects that targeted only women, ignoring men; simply targeting women led to backlash from men, and as a result, women often lost access to land and other resources as agriculture became profitable. The promising approaches refocus on households, with a new emphasis on seeing women as key farmers within households and communities. The second key lesson from current successful projects for women in agriculture is that an integrated approach is needed. While this term has been used previously, the promising approach is to develop projects that not only increase the production of women farmers, but also integrate women into markets for both inputs and outputs. Increasing production requires accessing or creating an input supply chain and finding ways for the women to finance the purchase of inputs. Finally, projects must also consider women's rights to land and other resources. If land rights are not addressed upfront, women may lose their claims to land as new market opportunities are created. Depending on the context, different approaches may be needed to secure women's land rights. The potential certainly exists to reach large numbers of women farmers and substantially increase their incomes with the additional impact of empowering these farmers to make positive changes in their communities.

CLOSING THE GENDER ASSET GAP: LEARNING FROM VALUE CHAIN DEVELOPMENT IN AFRICA AND ASIA

Agnes R. Quisumbing, Deborah Rubin, Cristina Manfre, Elizabeth Waithanji, Mara van den Bold, Deanna Olney and Ruth Meinzen-Dick

Editorial Note: The authors analyze and report on preliminary data collected under the Gender, Agriculture, and Assets Project (GAAP), jointly implemented by the International Food Policy Research Institute and the International Livestock Research Institute, to analyze the linkages between women's level of control over these assets and their ability to engage in emerging value chains.

INTRODUCTION

The past few years have seen a growing interest in strengthening the abilities of smallholder farmers, particularly women farmers, to produce for both home and the market. Although value chain analysis has increasingly come to address gender issues, there has been minimal focus on the intersection between women's asset endowments and their participation in market-oriented agriculture. This linkage is a focus of ongoing research under the Gender, Agriculture, and Assets Project (GAAP), jointly implemented by the International Food Policy Research Institute and the International Livestock Research Institute. The GAAP research documents the impact of agricultural development projects on men's and women's abilities to accumulate assets. This paper brings out the initial findings on changes in gender relations supported by the projects and explores the types of adaptive measures projects are taking to encourage more gender-equitable value chain project implementation.

METHODOLOGY

This paper builds on research of value chain-linked projects in South Asia and Sub-Saharan Africa, namely dairy projects in Bangladesh and Mozambique, horticultural projects in Burkina Faso (by the Helen Keller Institute – HKI) and the expansion of crop production in Uganda (by HarvestPlus). Qualitative and quantitative data from each of these projects is used to measure men's and women's access to, control over, and ownership of key productive assets, exploring the linkages between women's level of control over these assets and their ability to engage in emerging value chains.

The focus on assets rather than income is the result of recent research that has recognized the critical role of assets in both accumulating wealth and managing vulnerability. Access to, control over and ownership of assets, including land, livestock, homes, equipment and other resources, enable people to create stable and productive lives. Programs to increase ownership of

and control over assets help provide more permanent pathways out of poverty compared to programmatic measures that aim to increase incomes or consumption alone. A conceptual framework developed at the start of the GAAP research recognized the importance of looking at ownership, control, and access to assets, not simply at the household level, but also through identifying ways in which men and women engage with assets jointly and as individuals. The framework proposed testable hypotheses, including whether: i) different types of assets enable different livelihoods, with a greater stock and diversity of assets being associated with more diverse livelihoods and better well-being outcomes; ii) men and women use different types of assets to cope with different types of shocks; iii) interventions that increase men's and women's stock of a particular asset improve the bargaining power of the individual(s) who control that asset; and iv) interventions and policies that reduce the gender gap in assets are better able to achieve development outcomes related to food security, health, nutrition, and other aspects of well-being related to agency and empowerment.

The research illustrates both variation and commonality in men's and women's assets. While the specific types and numbers of assets that men and women individually and together identify as theirs vary from country to country, men typically continue to demonstrate more control over higher-value and larger assets. Women typically own lower-value assets, e.g., chickens rather than cattle.

Some of GAAP's partner projects did not initially include attention to gender asset disparities in their programming, in which case GAAP provided additional support to enable partners to analyze the impact of these interventions on the gender asset gap and its relationship to achieving project objectives. For example, expanding their training program to include women from the beneficiary households in the Mozambique project has resulted in women being consulted more by men in the household regarding decisions made about the household's dairy businesses. Other projects

had already recognized the role of gender considerations in contributing to, or detracting from, project success, and made adaptations in implementation to respond more effectively to the local context. Core programming activities in Bangladesh focus on building women's empowerment, but they found that they were able to increase women's participation in the dairy value chain by locating fixed milk collection facilities closer to producers within the project villages, even though restrictions on mobility remain a constraint for some. Results from the HarvestPlus and HKI projects suggest that women's access to land in terms of both ownership and decision-making affects the adoption of new varieties and agricultural practices as well as the ability to control proceeds from home gardens.

FINDINGS

Preliminary findings suggest that the agricultural interventions studied have successfully increased the stock of both men's and/or women's tangible assets, but particularly those assets they own jointly. In addition, the projects have also increased the stock of social and human capital, particularly for women. By providing training and facilitating the return of benefits to the women who are producers and suppliers, the projects follow principles for gender-equitable value chain development. But while increases in financial, human,

and social capital are clearly an important first step, other targeted support to the farmers' groups may be needed to translate these gains into avenues for the acquisition of the physical assets required to expand agribusinesses and to enter the non-production nodes of the value chain.

The findings further suggest that the successful development and operation of a value chain influences the way that people are both able to accumulate assets and the specific assets in which they are able to invest. The types of assets people have also influence the node at which they can participate in the chain. Each of these studies emphasizes the role of investments in human and social capital—through training programs and the formation and management of different types of farmer associations—as facilitating the accumulation of other types of physical and natural assets.

INCREASING THE PRODUCTIVITY AND EARNINGS OF RURAL WOMEN: WHAT WORKS?

James C. Knowles

Editorial Note: The author reviews in-depth 40 evaluations of projects designed to increase rural women's productivity and earnings, assessing the effectiveness of ten categories of such programs. The original studies reviewed can be found among the evaluation studies included in the Roadmap project online database.

INTRODUCTION

In an effort to better understand which strategies work to increase rural women's productivity and earnings, this paper reviews ten different interventions intended for this purpose, rating each as proven, promising, doubtful, or ineffective based on current evidence of the interventions' effectiveness,¹⁴ cost effectiveness,¹⁵ and sustainability.¹⁶ According to these criteria, the author rates one intervention as proven (conditional cash transfers to increase educational attainment), six as promising (land registration, rural electrification, rural savings, farmer field schools, improved use of modern agricultural inputs, and mobile phones), and three as doubtful (microcredit, crop insurance, and improved cooking stoves). While there is encouraging evidence on several of the interventions, the author recommends conducting additional research to fill gaps in the evidence base before further investments are made.

The sections below summarize findings from each of the interventions reviewed, followed by a description of priorities for future research.

FINDINGS

CONDITIONAL CASH TRANSFERS

What are the economic and social costs of failing to complete secondary school for girls across the developing world? When girls drop out before completing secondary school they are generally less productive as adults, more susceptible to early marriage and often less effective as parents. Conditional Cash Transfer programs (CCTs) are designed to support secondary school students in completing their studies. The cash transfers are given to parents (and sometimes directly to students) under the condition that the student(s) (more often targeted to girls) attend school for a minimum amount of time.¹⁷ When targeted to girls of secondary school age, CCTs are most cost-effective when dropout rates are high, and in settings in which schools of reasonably good quality are both physically

and socially accessible. The main drawback of these programs is the considerable time lag that is involved between program implementation and the resulting increases in labor productivity and earnings.¹⁸ Beyond increased labor productivity and earnings, future benefits for participants accumulate over many years, and include improved health, nutrition, and children's education.

LAND REGISTRATION

In most settings around the world, female farmers have access to less and poorer quality land than male farmers, limiting their productivity and income (World Bank, 2011; FAO, 2011). While many interventions have been used to improve rural women's access to land (including legal, educational and political approaches), the studies included here focus on land registration interventions (i.e., interventions that issue land titles or land-use certificates).¹⁹ Available evidence suggests that the positive effects of land registration on land productivity are largest when there is a significant risk of expropriation, where there are attractive opportunities for land-related investments, and where land and financial markets are relatively well-developed. There are wide-ranging differences in current evidence on the effectiveness of land registration interventions, and likewise, evidence on cost effectiveness varies widely due to large disparities from country to country in the cost per land parcel registered. There is no evidence that more complex registration procedures (e.g., centralized computer-based registries) are more effective than simpler community-based procedures. Based on the limited evidence of effectiveness, cost-effectiveness, and sustainability, land registration is rated only as promising.

RURAL ELECTRIFICATION

Many rural people in developing countries are still without affordable access to electricity, limiting the amount of time rural households can devote to productive activities. Most commonly, rural electrification interventions involve extending the grid to previously under-

served communities.²⁰ The main intermediate effects of electrification are a reduction in the cost of lighting, an increase in the use of electricity and a resulting increase in both work and leisure time for beneficiaries. Electricity may also be used to power appliances that increase productivity in housework, which is disproportionately done by women. Available evidence suggests that rural electrification is a promising intervention, particularly if the intervention consists of providing targeted subsidies to unconnected households in communities with previously established access to a grid. That said, evidence also suggests that rural electrification is less effective in very poor settings. Because connection charges often prevent the poor from connecting to the grid, the distribution of benefits is an important issue for grid extension interventions. More credible evidence of effectiveness is necessary before this intervention can be considered proven.

RURAL SAVINGS

Many rural women, especially the poor, save very little or not at all. Low-cost microfinance institutions in rural areas can provide a vehicle for savings as well as credit without the costs of accessing a bank account with a formal financial institution.²¹ Alternative rural savings approaches include the formation of a network of rural deposit collectors who forward the collected deposits to a bank, or the use of mobile-phone based systems such as M-Pesa in Kenya. By increasing rural women's savings, savings schemes can lead to higher investment in income-producing assets, increased consumption smoothing, and gender empowerment. The rural savings interventions for which effects have been carefully analyzed appear promising. Evidence on the effectiveness of commitment savings accounts varies by context; however, accounts are likely to have more impact in settings in which intra- and inter-household transfers are an important obstacle to women's savings. Additionally, multiple studies suggest that regular text message reminders may be an effective savings intervention. Given the generally positive, but limited and relatively narrow evidence on the effectiveness and cost-effectiveness of this intervention, it is rated as promising.

FARMER FIELD SCHOOLS

Women are often ignored or under-served by agricultural extension services, and as a result they often do not use the most effective cultivation practices. Involving women in farmer field schools (FFS)—schools that use direct field observation and experimentation to

educate farmers—can increase both their productivity and income. FFS may help boost the productivity of neighboring farmers as well. Positive features of FFS include relative ease in targeting the intervention to women and their demonstrated feasibility. Although FFS have been widely implemented throughout the world, with some positive effects observed, this intervention is rated only as promising, reflecting the lack of convincing evidence on its effectiveness and cost-effectiveness.

IMPROVED USE OF MODERN AGRICULTURAL INPUTS

Farmers in many developing countries (and particularly female farmers) use less modern inputs, such as fertilizer and improved seeds. A variety of interventions have been piloted to improve the use of modern agricultural inputs, including the direct distribution of inputs to farmers and visits from extension workers—interventions that can increase farmers' productivity and total household income. In designing the intervention, implementers must consider its effect on the entire household's income, as other household income-earning activities may be curtailed when activities using improved inputs gain higher returns and require additional time. There is a lack of information on the cost-effectiveness and sustainability of these interventions, as well as their impact on high-level outcomes, such as total farm income. Additionally, this intervention might not increase farmer incomes if modern inputs are not used properly, or if local conditions are such that the apparent under-utilization is in fact profit maximizing, given the constraints actually facing a given group of farmers in a given locality. Limited access to cash or credit, and high risk due to highly variable rainfall or crop prices, may also be important barriers to use. Accordingly, these types of interventions need to be field-tested carefully in the areas where they are to be used (including the possible sensitivity of impacts to seasonal variations in climate), and there should be adequate technical support provided to farmers as well as access to credit and crop insurance, if needed. Based on the limited evidence of effectiveness, cost effectiveness and sustainability, these interventions are rated only as promising.

MOBILE PHONES

One of the most serious economic constraints facing rural women globally is their limited time (World Bank, 2011a; FAO 2011). Rural women tend to work very long days, balancing a variety of tasks, such as crop and livestock production, wage employment, child

20 Less commonly, subsidies are provided to encourage unconnected households to connect to existing grids (World Bank 2005, World Bank 2008). In remote areas, rural electrification may also involve the provision of off-grid electricity sources, such as local grids based on small hydroelectric or fossil-fuel-burning power plants or electricity from solar, wind or geothermal power.

21 Typical costs include the cost of opening the account, and travel expenses incurred in accessing the account (as formal financial institutions are often located in urban areas).

care, care of the sick and elderly, and other household-related activities.²² These tasks curb their ability to participate in more productive work, accomplish tasks that require time-consuming travel, and enjoy recreation or leisure time. Modern technological innovations, such as mobile phones and prepaid phone cards, have the potential to reduce rural women's need to travel long distances to obtain market information or to conduct financial transactions, potentially raising the effectiveness of interventions such as labor market interventions, rural savings schemes and conditional cash transfers. Expanding rural women's use of mobile phones could increase their productivity and earnings, or help them to use time in a more efficient way, giving them extra time to spend on work, recreation or leisure. Using mobile phones more frequently may also result in resource savings, improved health, increased household savings, increased and more timely remittances, insurance protection, improved access to information, and more effective consumption smoothing. For example, by reducing the time needed to conduct financial transactions, "M-money" interventions appear to be cost-effective in areas where the necessary communications infrastructure exists and where at least one household member is literate. However, there is currently only limited information on the effectiveness, cost effectiveness and sustainability of mobile phone interventions. Accordingly, they are rated only as promising.

MICROCREDIT

Rural women have poor access to credit due to the limited presence of financial institutions in rural areas. As a consequence, rural women tend to borrow from moneylenders who charge high interest rates. Microfinance institutions (MFIs) provide an alternative to high interest moneylenders, often pairing loans with the provision of financial literacy or business training, and committing their members to save on a regular basis. Microcredit has several advantages, including its proven track record of institutional and political sustainability and its ability to reach large numbers of rural women. However, there is very weak evidence of microcredit's effectiveness on targeted outcomes (i.e., women's earnings and empowerment), a related lack of evidence of its cost-effectiveness and questions about its financial sustainability. The available evidence indicates that microcredit interventions are of doubtful effectiveness until more credible impact evaluations can be conducted.

CROP INSURANCE

Farmers are subject to considerable risk of crop failure from one growing season to the next, particularly in areas where crops are rain-fed rather than irrigated. They are also frequently subject to additional risk from fluctuations in crop prices. Farmers receive incomplete insurance against these risks from informal risk-sharing networks, particularly if such networks are unable to indemnify against aggregate risk (as opposed to farmer-specific losses). It has been suggested that this risk is an important barrier to agricultural investment. Crop insurance includes both rainfall insurance and crop price insurance. Formal rainfall insurance is usually based on an official index of rainfall in a given local area, with the insurance paying out when annual rainfall is below a certain minimum level (signaling drought) or above a certain maximum level (signaling flooding). One problem is that even with formal index-based rainfall insurance, there is a risk of mismatches between payouts and actual losses due to the remote location of the rainfall gauge. Crop price insurance, used less widely than rainfall insurance, partially indemnifies farmers against abnormally low crop prices. Low take-up rates for formal index-based rainfall insurance appear to be due partly to the complexity of the product and partly to other barriers (cash constraints or the effective coverage of informal insurance mechanisms). The currently available evidence suggests that these barriers can be partially overcome with financial literacy training and subsidies, but even with such measures take-up rates remain low. Although crop insurance may be cost-effective in some settings as a social protection intervention, there is only weak evidence that crop insurance stimulates additional agricultural productivity, which is the rationale for supporting it in the context of this paper. Accordingly, this intervention is rated as doubtful.

IMPROVED COOKING STOVES

Tens of millions of improved cooking stoves have been distributed globally by governments, NGOs and donors to stem the use of traditional cooking stoves, which expose mainly women and children to indoor air pollution, causing serious health effects (Duflo, Greenstone, & Hanna, 2008; Miller & Mobarak, 2011).²³ Combating such health effects to improve the health of women and children could increase both women's labor productivity and children's school attendance. Use of improved cooking stoves may also result in reduced fuel consumption (and the time required to collect it)

22 These activities could also include food preparation, water and firewood collection.

23 In addition, there are plans to fund millions more. In September 2010 Hillary Clinton announced the formation of the Global Alliance for Clean Cookstoves, which calls for 100 million additional homes to adopt clean and efficient stoves and fuels by 2020.

and reduced cooking time. While donors that subsidize improved cooking stoves often provide assistance with installation and training in their correct use, there is currently only limited reliable information on the effectiveness of improved cooking stoves in real-world conditions. The only study that has obtained such estimates is not encouraging. However, the study is limited to one geographical area, and it is unclear that the same results would be obtained in a different setting (for example, where women have more influence on intra-household decision making and where there is less resistance to change in traditional cooking methods). Without additional credible studies in other geographical areas, the available evidence indicates that interventions to provide improved cooking stoves are of doubtful cost-effectiveness; more credible research is needed in this area.

RESEARCH PRIORITIES

This paper's findings point to several research priorities. First, few of the impact evaluations provide information on: (1) gender-specific effects, (2) high-level outcomes such as household income and gender empowerment versus intermediate outcomes such as crop yields, (3) longer-term outcomes (effectiveness is typically assessed after only one year), or (4) economic costs. The absence of estimates of comparable gender-specific effects on higher-level outcomes, like women's income and household expenditure as well as estimates of costs, prevents the systematic use of cost-effectiveness analysis to help in identifying what works. More high-quality randomized field experiments are needed, especially for interventions identified as promising. It would be more cost-effective at this time to invest in additional research on the effectiveness, cost-effectiveness and sustainability of these (and possibly other) interventions than to invest large sums in the interventions themselves. Funding to obtain such information could be leveraged effectively by targeting it to the identified gaps in existing impact evaluations. A second finding of this review is that there appears to be a serious disconnect between the claims made for several interventions in the broader development literature and the actual evidence of their effectiveness. Much funding has been allocated (and is still planned to be allocated) to interventions such as microcredit, farmer field schools, crop insurance and improved cooking stoves in the absence of solid information about their effectiveness, cost-effectiveness and sustainability.

HOW TO IMPROVE WOMEN'S EMPLOYABILITY AND QUALITY OF WORK IN DEVELOPING AND TRANSITION ECONOMIES

Petra Todd

Editorial Note: In this study the author reviews in detail 20 impact evaluations of different types of policies and programs that are designed to improve women's labor market participation rates. The studies reviewed can be found among the evaluation studies included in the Roadmap project online database.

INTRODUCTION

This paper analyzes the effectiveness of a variety of policy interventions and social programs that aim to improve the quantity and quality of women's work. All of the programs included were subject to quantitative impact evaluations of different kinds and some also to rigorous cost-benefit analyses. Many programs were found to be effective in increasing women's quantity of work as measured by increased rates of labor market participation and number of hours worked, and in some cases, the programs also increased quality of work. This review details key lessons learned on the effectiveness of each type of program.

FINDINGS

ACTIVE LABOR MARKET POLICY (ALMP) PROGRAMS

Active Labor Market Policy (ALMP) programs are often adopted by countries as a way of reducing unemployment or ameliorating the effects of macroeconomic shocks. These programs are not usually targeted at women, although women often seek out program services and benefit from them. ALMP programs take a variety of forms that may include job search assistance, training, internships, public works jobs or wage subsidies. Often, programs have more than one of these features.

The following conclusions emerge from the review for designing effective ALMP policies:

1. ALMP program impacts for women often exceed those of men. Studies differ, though, in their findings about whether more educated or less educated women or older or younger women benefit most from participating.
2. The majority of ALMP programs increase women's employment rates and increase their exit rate out of unemployment, but do not lead to substantial wage increases. The evidence suggests that ALMP programs help workers find jobs more quickly but sometimes at a lower wage than they would otherwise be able to obtain searching on their own.
3. Short-term classroom training interventions (e.g. 3-6 months) do not bring about large changes in earnings capacity.
4. The effectiveness of training programs is enhanced when there are explicit ties to private sector firms, with firms agreeing to provide jobs or internships for people after they receive the training. Such ties help to ensure that there will be future placements for the trainees and that the type of training provided is the type demanded in the marketplace.
5. Programs should be designed in a way that creates incentives for training program providers to help trainees find jobs. For example, training program providers can be paid for their services only upon successful placement of the individual in a firm for a certain number of months. However, such provisions will also typically lead to training program providers being more selective in who they admit into training, and special provisions may need to be made to incentivize them to serve so-called "hard-to-serve" individuals, if they are a priority of the program.
6. Asking trainees to contribute a small amount towards their training can be an effective way of selecting applicants who expect to benefit most from training.
7. Highly educated workers with specialized skills (such as those who worked in former Communist countries like Russia) do not appear to benefit from basic training/retraining programs. More evidence is needed on how the programs can be tailored to the meet the needs of these kinds of workers.
 - Wage subsidies/vouchers can be effective in settings where women have relevant skills, but there are obstacles to their meeting prospective employers, for example, due to discrimination. They provide an "empowerment" effect, giving women more confidence in approaching employers, and can also help overcome firms' barriers to hiring workers.

- Public works programs (sometimes called Socially Useful Projects) can be effective in alleviating poverty and mitigating the effects of macro-economic shocks in settings where there is widespread unemployment and job creation is a priority. But, otherwise, programs that attempt to place trainees in existing jobs at private sector firms are more effective than public works programs.

What evidence is needed?

In many countries, ALMP programs operate on a very large scale. An issue that was not addressed by evaluations was the extent to which large government-sponsored training programs crowd out private training. Additionally, it is possible that the benefits observed for program beneficiaries are at the expense of non-beneficiaries, because of displacement, substitution effects or lower wages. For example, a wage subsidy might encourage a firm to hire a particular worker rather than some other worker. It would therefore be useful to more systematically analyze the effects of these programs within a job search modeling framework to gain a better understanding of the mechanisms through which the programs operate—how they affect the costs of searching for a job, the arrival rate of offers and the distribution of wage offers for all workers, not just participating ones.

Also, none of the studies in this review analyzed whether providing adult women with job training or job search assistance affects their marriage or fertility choices. If women have better labor market prospects, they may delay marriage, find better marriage partners and postpone fertility, or (due to higher income) experience an increase in fertility. These questions warrant further investigation to assess more fully the effectiveness of these programs on the women who participate in them.

YOUTH-ORIENTED TRAINING PROGRAMS

Evidence on the effectiveness of programs targeted towards youth is generally more uniformly positive on employment and wages. The programs tend to combine classroom training with an internship component. Some key findings include the following:

- Evaluations of programs in Argentina, Peru, and Colombia found evidence that youth training programs (classroom training followed by on the job training) led to higher employment and higher earnings, although one study of a similarly designed program in the Dominican Republic found it to be ineffective in increasing employment or earnings.

- Benefits of the on-the-job training component have been found to be higher than that of the classroom training component. The link between the training provider and the private firm willing to take on the worker after training is important to a program's effectiveness.

What evidence is needed?

With any youth employment program, there is the risk that the program may draw youth out of school. Targeting programs at low-skilled youth can make them more attractive to be a low skill youth, which can discourage skill investment. Most of the programs examined were targeted at youth who were already out of school and were not intended to affect youth in school, but if in-school youth know about the availability of these programs, there is the possibility that these programs encourage youth to drop out of school. There may also be effects on other early life decisions, such as decisions regarding marriage and fertility. The studies reviewed here did not consider how these programs affect schooling levels, marriage, or fertility decisions.

Very few of the studies analyze cost-effectiveness. The one study that does (conducted in Argentina) found that program impacts have to be sustained over the longer term (9 years or more) for the program to be cost-effective, and none of the evaluation studies follows participants over that long a period.

CHILDCARE PROGRAMS

Another class of programs reviewed are programs that affect the availability and pricing of childcare. In some cases, the program built and staffed new childcare centers or preschools. In other cases, it paid for an individual to be an at-home community day care provider, which facilitates work for other women. A key concern with childcare programs is that they might stimulate fertility by lowering the costs of rearing children. Of the studies reviewed here, only one study examined potential effects on fertility and did not find any impacts (Schlosser, 2011).

In addition to the potential benefits for mothers, childcare programs have potential health and education benefits for children participating in them, who receive nutrition and education, and for older children in the family (typically girls), who are able to attend school rather than having to care for younger siblings. Below, we summarize broad conclusions and policy recommendations with regard to child care programs:

- Evaluations of childcare programs in Guatemala, Colombia, Argentina and Brazil found strong effects of childcare availability on mother's rates

of working and on the number of hours worked. Several of the community daycare programs also showed substantial positive benefits on the nutrition and development of the young children participating in them, implying high benefit-cost ratios.

- Providing free preschool for Arab mothers in Israel, a group for whom labor force participation rates were low, led to a substantial increase in their labor supply, with no observed changes in fertility. Thus, the programs can have potentially large effects, even in settings where it is not common for women to work.
- Strong evidence for a substantial effect of childcare costs on working behavior comes from formerly Communist countries like Romania and Russia that have undergone very large changes in the costs of child care. Some countries went from childcare being free and widely available to a situation where it is expensive and a major determinant of whether women work. The two studies reviewed here found women's labor supply to be fairly elastic with respect to the price of childcare.
- Childcare subsidies are more effective than wage subsidies or family income subsidies in increasing family income levels, in part because of better targeting at women whose labor force behavior is potentially affected by the policy.
- The effectiveness of childcare programs in increasing mother's labor supply and hours worked is likely to depend on the country context. In the context of Accra, Ghana, the local supply of childcare was found not to be a significant determinant of mother's working decisions, because mothers worked in jobs where they found it relatively easy to combine work with care for children.

What additional evidence is needed?

With any childcare program, there is a concern that publicly provided childcare may crowd out the supply of privately provided care, a question that so far has not been rigorously examined. In settings where there are quality private sector childcare options available, it may be better to provide women with child care vouchers rather than building new childcare facilities.

Additionally, it is desirable to know how putting the child in the childcare program compares to the child staying home with the mother. Some of the studies reviewed examined the effects of the childcare program on child health and development and the effects were generally found to be positive, but there needs to be more systematic investigation of child outcomes, along with adult labor market outcomes and effects on

fertility to fully assess the effectiveness of child care programs.

ELDER CARE

The empirical evidence on whether elder care inhibits women's work is mixed, with Mroz et al. (2012) for Mexico finding that elder care reduces the probability of women working, Bravo and Puentes (2012) for Chile finding no effect, and Mauer-Fazio et. al. (2012) for China finding that co-residence with elderly persons facilitates women's work. The question of whether the presence of elderly persons in the household affects women's capacity for work is likely to be context-specific, depending on the reasons elderly co-reside with younger or middle aged persons (usually, their children). In country settings where co-residence with elderly is common and is not closely tied to the elderly needing care, co-residence may enhance the capacity for women to work, as older parents or parents-in-laws assist with child-caring duties. But in other settings, such as the United States, where co-residence is relatively uncommon unless the older person needs care, then the presence of elderly likely imposes demands on women that compete with their capacity to work, without leading to many benefits. More research is needed on the decisions that women jointly make about childcare and elder care and co-residence to better understand how the factors jointly influence women's labor market outcomes. At this stage, there is not enough evidence to support elder care programs as a way of increasing female employment and earnings.

OTHER PROGRAMS

This review included a variety of other types of programs that have been found to influence women's labor market outcomes, including a workplace health program, a gender equity program, and land titling programs. The evaluations from these programs yielded the following results:

- The Extended Service Delivery workplace health program, a USAID demonstration project examining the cost-effectiveness of providing worksite health services to garment workers in Bangladesh, was successful in reducing worker absenteeism and turnover and was deemed cost-effective. Similar interventions might work in other settings where there are clearly inadequate public health services for women and/or where the work environment includes chemical hazards.
- Workplace gender equity programs try to raise awareness about gender equity issues and to reduce workplace discrimination. There is evidence

from process evaluations and from qualitative evaluations that these programs have been successful in Mexico, Chile and other Latin American countries where they introduced (and in some case they have led to) the adoption of formal government policies concerning gender equality. However, when the program was adapted and implemented in Egypt, a quantitative evaluation of the program indicates that it was largely unsuccessful, in part because few firms were interested in participating. For those firms that did participate, its effect is hard to measure. If a program raises awareness of what constitutes discriminatory behavior, then it is likely that women in the treatment group will be more prone to report experiencing discrimination in the workplace, which seems to have happened in the evaluation.

- Land titling programs are an innovative approach to increasing the wealth of poor households and, when the title is in the name of the woman, to have a potentially large effect on family bargaining arrangements. They have been found to change an array of household behaviors, including labor supply of household members. The land titling programs reviewed in this study (from Peru and Argentina) increased female labor supply, increased the tendency for women to work outside the home and decreased fertility.

Thus, the workplace health program and the land titling programs had promising positive effects both on women's labor force participation and hours of market work.

CASE STUDIES AND BEST PRACTICE RESEARCH ON EMPOWERING WOMEN THROUGH CLEAN COOKSTOVES PROJECTS IN BANGLADESH

Nepal Chandra Dey

Editorial Note: The author conducts an exploratory study through in-depth interviews and focus group discussions to report on the potential impacts of incorporating women into the clean cooking stoves door-to-door sales model in Bangladesh. A review of secondary data (literature and best practice review) is also included.

INTRODUCTION

The Women's Economic Empowerment Initiative and the Global Alliance for Clean Cookstoves²⁴ co-commissioned a study to examine best practices and highlight case studies of projects that empower women through employing women in clean cooking projects in Bangladesh.

An estimated 30 million households in Bangladesh are exposed to household air pollution due to the use of biomass for cooking and heating. This exposure is reported to cause 46,000 deaths, mostly of women and children, each year. In addition to the dire health impacts, women can spend hours every day collecting fuel, and the rapidly expanding population and heavy reliance on biomass has put pressure on Bangladesh's limited forest resources, with 50 percent of the forest cover lost since 1970.

The objectives of the study were to document the benefits of incorporating women in the clean cooking value chain in Bangladesh, to conduct a review of relevant policies highlighting the linkages between gender and women's empowerment and household energy and to conduct analysis at the entrepreneur and organization-levels about the challenges of and best practices for integrating women into clean cooking businesses and mainstreaming gender throughout their operations.

FINDINGS

The study found that while there is an understanding among implementers that the potential for women's involvement in improved cooking businesses is high, there have been limited targeted efforts to involve women in the value chain both from the organizational and entrepreneurial levels.

24 The Global Alliance for Clean Cookstoves is an innovative, public-private partnership to save lives, improve livelihoods, empower women, and combat climate change by creating a thriving global market for clean and efficient household cooking solutions. The Alliance's "100 by '20" goal calls for 100 million homes to adopt clean and efficient stoves and fuels by 2020. The Alliance will work with public, private, and non-profit partners to help overcome the market barriers that currently impede the production, deployment and use of clean cookstoves in the developing world. The Alliance recognizes that women globally have a crucial role to play in developing designs that are user-friendly as well as in ensuring the sustained adoption of clean cookstoves and fuels, and is therefore working to mainstream gender and women's empowerment into project planning, objectives, and implementation as a means to increase project effectiveness, development impacts, and adoption rates.

Analysis at the organizational level looked at highlighting specific interventions to increase the number of women employees, main challenges and solutions, cost of implementation, cost of measuring efforts, role of women successfully engaged in the value chain, the model used to engage women and efforts to mainstream gender within the institution. At the entrepreneurial level, analysis included profiling women employees and their access to transport, training and credit, their representation at different levels within the business, perceived constraints of hiring women and the effects of saleswomen on sales.

Findings reveal that very limited initiative has been taken to involve women in the cookstove value chain both from organizational as well as entrepreneur level. Irrespective of the geographical and cultural heterogeneity, only a small percentage (10-15 percent) of the women were employees when the business was headed by a male entrepreneur, and most of the employees (over 80 percent) were women when the business was run by a female entrepreneur. In addition, a very limited number of women entrepreneurs, including cookstove businesses, were found in the rural areas across the country.

The study identified what has been working among the three largest cookstove implementers in the country—GIZ, Grameen Shakti and the Village Energy Resource Center. These include practices such as identifying strong female entrepreneurs in other sectors and recruiting them into the cooking sector, connecting entrepreneurs to microcredit, assigning gender focal points within the organizations, developing Gender Action Plans to identify specific gender targets and outline strategies for increasing staff's capacity on gender responsiveness, and collaborating with women's organizations, such as the Bangladesh Women's Chamber of Commerce and Industry.

CONCLUSION

Although previous studies have shown that women play an important role in supporting their households by generating income, they face persistent and structural constraints, including patriarchal ideologies and adverse socio-economic norms that prevent them from fully improving their lives. In order to increase the number of women earning income from cookstove and fuel enterprises, work environments need to be more women-friendly; women need to be specifically targeted through media and marketing; initial seed capital should be provided, and community leaders should be engaged to reduce the stigma and increase the acceptance of women working outside of the home. These interventions are necessary in order to reduce the barriers that women are more likely to encounter, such as social and family constraints, lack of financial capital, negative attitudes toward women employees and lack of awareness about the opportunity itself.

IDENTIFYING RESEARCH GAPS AND PRIORITIES FOR WOMEN'S ECONOMIC EMPOWERMENT: GENDER AND YOUTH EMPLOYMENT

Elizabeth Katz

Editorial Note: The author reviews and synthesizes the empirical evaluation evidence on programs that address gender-specific components of youth employment. The 11 programs reviewed in-depth can be found among the evaluation studies included in the Roadmap project online database.



INTRODUCTION

In the past five years, dozens of initiatives have been launched focusing on facilitating readiness for and access to decent employment for young people in low and middle-income countries. From a program design perspective, some general lessons have already been learned about how to increase young women's participation in youth employment programs. This paper builds on these findings by reviewing and assessing the latest international evidence on the gender-specific impacts of youth employment policies and programs.

GENDER AND YOUTH EMPLOYMENT IN AN INTERNATIONAL PERSPECTIVE

According to the 2012 update of the ILO's Global Employment Trends for Youth, global youth unemployment rates rose to 12.6 percent in 2011 and are projected at 12.7 percent in 2012. Moreover, demographic trends are such that the youth labor force continues to grow in precisely those regions where few opportunities for paid work exist and where working poverty is widespread. Within the developing world, there are marked regional differences across genders within the youth labor force. In South Asia, the Middle East and North Africa, fewer than one-quarter of young women are in the labor force. Conversely, over half of female youth in East Asia and Sub-Saharan Africa are considered to be economically active, on par with their male counterparts. For female youth in developing countries, recent increases in unemployment have been particularly large in North Africa, where unemployment among young women has risen by almost 30 percent since 2008; in South Asia, female youth unemployment has increased by almost 14 percent in the same period.

IMPACTS OF ADOLESCENT GIRLS' LABOR MARKET PARTICIPATION

The most apparent benefit of adolescent girls' employment is that it generates income for poor households. A common finding of studies of export-oriented formal sector industries in developing countries is that wag-

es are significantly higher than in the informal sector, particularly for young women with low levels of education. It is also commonly the case that unmarried girls contribute most if not all of their earnings to their parents' households, helping to finance basic expenditures such as food and housing, as well as longer-term investments in health and education. The impact of adolescent girls' employment goes beyond immediate income generation. There are also important potential effects on longer-term career trajectories and future earnings, psychological and social development (including mitigating the adoption of risky behaviors), savings and asset accumulation, and the delay of marriage and childbearing. Savings and asset accumulation can provide young working women with experience in financial management, insurance or investment funds, and can give girls independently controlled assets as they enter marriage. A large body of research supports the notion that the resources that women contribute to marital unions increases their bargaining power within the household, with implications for reproductive decisions, as well as expenditures on children's health and education. Women's labor force participation can also delay marriage and childbearing. Finally, the concern over young women's economic opportunities in developing countries has macroeconomic implications as well. Based on analysis of data from 14 developing countries, one study estimates the cost of girls' economic inactivity (relative to a norm of male youth inactivity) to be as high as 4.4 percent of GDP for India, 3.5 percent for Nigeria, and 3.3 percent for Paraguay.

EVIDENCE ON THE IMPACTS OF YOUTH EMPLOYMENT PROGRAMS FOR WOMEN

In Latin America, a number of youth employment programs have offered a wide range of skills training to young women and men on an equitable basis, providing additional support to young mothers in the form of a child care stipend. These programs have also delivered services through decentralized mechanisms that can better capture the skills needs and work opportunities of local communities. This new "Latin American"

model of vocational education has succeeded in increasing young women's employment and earnings in a number of countries. Results from studies of the Latin American youth job training programs suggest that the "soft skills" component (e.g., conflict resolution, team work and communication skills) is more valuable than the technical skills component. This finding may be due in part to a divergence between the content of the vocational training and the actual skill demands of employers. Findings also suggest that the quality of the on-the-job training component varies with firms' incentives to invest in youth training and by their capacities to offer high-quality instruction to their interns. Finally, results indicate that programs requiring a commitment by participating firms to hire trainees have significantly higher job placement rates than programs that do not have such a requirement.

Why are the impacts of many of the Latin American youth labor market training programs stronger for women than for men? First, young women make up the majority of participants in all of the programs; many also offer childcare assistance. That said, it is unclear whether the gender differences in impacts are due to supply-side factors such as systematic differences in skills, or to demand-side influences such as firms' preferences for female workers.

The ability to develop these types of programs in other countries may be limited by several factors. First, the decentralized nature of these programs relied on a pre-existing, well-developed national network of private and not-for-profit vocational training centers, as well as community-based non-governmental organizations, with which to contract. Second, the formal private sector in these middle-income countries is large and vibrant enough to be interested in participating in such a scheme. A third set of factors limiting the replicability of the Latin American youth employment training model are more social in nature, related to the relative lack of restrictions on young women's mobility and their ability to interact with men in public in the region.

Besides the youth programs in Latin America, the most comprehensive and ambitious set of school-to-work labor market training programs targeted to adolescent girls is the World Bank's Adolescent Girls Initiative (AGI). Launched in 2008, the AGI is comprised of interventions in eight countries—Afghanistan, Haiti, Lao People's Democratic Republic, Jordan, Liberia, Nepal, Rwanda and South Sudan—which are currently at different stages of implementation and evaluation. While each country program has unique features, all include a job skills training component.

Results from the AGI are underway. In Liberia the program was successful in increasing employment and earnings among young women. These gains were particularly large for women who received business skills training, and all graduates were more likely to be involved in self-employment than wage employment—a finding that reinforces the importance of incorporating entrepreneurial and life skills curricula in contexts where wage employment is limited. In Jordan, results were more disappointing, revealing a lack of effect on employment for women in the long run, and no impacts from the soft skills training component. These results suggest that interventions addressing demand-side constraints that prevent firms from creating more jobs for young women may instead be needed to address the problem of persistent low employment for women throughout most of the Middle East. In Nepal, the Adolescent Girls Employment Initiative (AGEI) is scaling up, and early results indicate that 90 percent of program training graduates have passed a skills test and 83 percent of girls who have completed training have found employment. AGI results from South Sudan are not yet available. In Lao, the emphasis of the AGI program is on building the capacity of unemployed young women to engage successfully in small business activities. The most promising projects were awarded grants and the young entrepreneurs have been matched with mentors from the private sector that will support grantees as they set up businesses.

THE VALUE OF INFORMATION

Both the Latin American youth programs as well as the projects supported by the AGI rely on combining training and direct labor market intermediation to enhance beneficiaries' access to jobs. An alternative approach is more indirect in nature, and relies on providing information about existing labor market opportunities to disadvantaged young people and their parents. The expectation with these interventions is that knowledge of employment opportunities will elicit household-level investment in the accumulation of the necessary skills and human capital to be qualified for the jobs. Several studies indicate that information alone can play a powerful role in readying youth for the labor market. For instance, in the Dominican Republic, eighth grade boys who were provided basic information about the earnings differences between primary school graduates, high school graduates and university-educated workers stayed in school longer than a control group of boys.

SMALL ENTERPRISE GRANTS AND TARGETED MICROFINANCE PROGRAMS

The potential for youth to effectively utilize and benefit from grants and loans geared towards self-employment is controversial, and the evidence is mixed. In its assessment of the use of microfinance programs as a tool to address adolescent girls' vulnerability to HIV infection, USAID argues that traditional microfinance programs are not suitable for younger adolescents, while specially adapted programs might be appropriate for older adolescents. The experience of the Tap and Reposition Youth (TRY) project in Kenya revealed that for a majority of young women, entrepreneurship and repeated borrowing were not primary concerns. Rather, their fundamental needs were related to acquiring social capital (including accessing support groups and mentors), maintaining physical safety, and having the opportunity to save their money in a safe, accessible place. When these needs are met, entrepreneurship and use of credit opportunities may follow. However, recent findings from an experimental evaluation of the Youth Opportunities Program in Northern Uganda suggests that, at least in some contexts, young people can make excellent use of unconditional cash transfers to invest in vocational training, tools, and small enterprise start-up costs. In some contexts, cash transfers may provide a temporary source of income, allowing young girls to postpone marriage and motherhood.

ADOLESCENT REPRODUCTIVE HEALTH AND ECONOMIC EMPOWERMENT: LIVELIHOOD PROGRAMS

An alternative approach to enhancing young women's economic opportunities comes largely out of the population and reproductive health field, through programming that recognizes the economic dimension of the transition from childhood to adulthood. Programs such as the Adolescent Development Program (ADP) address issues such as early marriage, dowry, and reproductive health in programs throughout Asia and Africa. The implementing agency, BRAC, initiated a separate, microfinance-based program targeted to girls and young women between the ages of 14 to 25 years, called Employment and Livelihood for Adolescents' (ELA), requiring participants to save in a BRAC savings account before becoming eligible for a small loan. Recent evaluations of BRAC reveal that, while there is evidence of selection bias, results show increases in earnings and savings, as well as positive impacts on social interactions, reading and mobility. A separate evaluation of a pilot program to incorporate financial education into BRAC's ADP found that girls aged 14-19

who participated in a 20-hour program of instruction covering financial values and responsibilities, planning, saving, borrowing and budgeting significantly increased their financial knowledge and behaviors relative to a control group. Evaluations from Uganda reveal that BRAC has positively impacted girls' measurable life and livelihood skills, as well as income generation and savings. Also in Uganda, the SUUBI Research Program tested the efficacy of offering financial education, mentoring, and matched Child Savings Accounts (CSA) to AIDS-orphaned adolescent youth. A striking difference is exhibited along gender lines: whereas the score for girls remained unchanged over the 10-month period, the inclusion of an economic empowerment component appears to have decreased boys' in the experimental group's approval of risky sexual behaviors. Both boys and girls were able to save comparable amounts towards furthering their education.

In understanding findings on livelihood programs within very socially conservative settings, such as the Middle East, the goals of adolescent programming for girls may have to be modified to provide new opportunities to female youth who are isolated, denied access to education and/or expected to marry and have children of their own at young ages.

CONCLUSIONS AND RECOMMENDATIONS

In trying to draw meaningful conclusions and offer useful recommendations based on the analysis of the diverse spectrum of programs described in this paper, it is important to distinguish the objectives and target populations of these programs. First, while they all include young women as beneficiaries, some are inclusive of young men; this is the case for the Latin American training programs, as well as for the Ugandan cash transfer program. In both of those cases, women benefited disproportionately, but the initial objectives were not particularly gender-focused. Second, while most of these programs have (either wage or self-) employment as their primary objective, those geared towards younger women and girls also tend to give equal weight to reproductive health education and awareness. This is important because for so many adolescent girls, early marriage and childbearing, as well as exposure to sexually transmitted diseases, is one of the greatest impediments to their participation in economic activities.

Keeping in mind this heterogeneity of program objectives and target populations, at least two broad lessons can be learned from the analysis of these programs:

1. Traditional vocational educational programs need to incorporate one or several of the following design elements in order to be effective for young women:
 - “Soft skills” training, such as teamwork and communications—an especially important component in economies where firms recognize and value these skills in their employees
 - “Life skills” education, with an emphasis on reproductive health and financial management; this is particularly relevant in environments where early marriage and childbearing limit young women’s labor market participation and economic independence
 - Child care provision, either in the form of on-site care or subsidies/vouchers, to allow young mothers to attend classes and participate in internships
 - In environments with substantive wage employment opportunities, meaningful linkages to private firms to guide curriculum development, enhance internship training and offer long-term job opportunities for program participants
 - In environments with weaker formal wage sectors, entrepreneurship or business development skills training to increase the possibility of successful self-employment
2. Unconditional cash grants—but not microfinance—may have unexpectedly strong social and economic benefits for young women.
 - Individual transfers to parents and adolescent girls that were not conditional on school attendance allowed those girls to avoid early marriage and pregnancy.
 - In Uganda, where the grants were given to groups of youth, young women in particular were able to productively use the cash transfers to invest in vocational education and business assets, significantly increasing their employment and incomes.

Going forward, funders and practitioners should continue to experiment with these and other innovative approaches to programming for adolescent girls and young women. Key to the success of any program is a nuanced understanding of the specific constraints and opportunities facing female youth in their unique economic and cultural contexts; while it is possible learn from the successes and failures of the experiences presented in this paper, there is clearly no “one size fits all” recipe for young women’s economic empowerment.

MAPPING DEMAND FOR WOMEN'S ECONOMIC EMPOWERMENT PROJECTS: A GLOBAL ANALYSIS OF UN WOMEN'S FUND FOR GENDER EQUALITY PROPOSALS

UN Foundation and UN Women Fund for Gender Equality

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INTRODUCTION

What kinds of economic empowerment programs would implementing organizations around the world ask for if they could speak directly to donors? While practitioners and policy-makers often use research to gain a clearer understanding of what types of programs work well for women, it is rare to have insight into the kinds of projects that are most in demand in various contexts around the world. To shed light on the global demand for women's economic empowerment programs, this project analyzes the 1,244 women's economic empowerment proposals submitted to the Fund for Gender Equality (FGE) during the 2009-2010 and 2011-2012 grantmaking cycles. It highlights the most frequent project types, sectors, and regions for which field-based implementers sought funding support.

Each proposal contained multiple proposed interventions. Of the 1,244 proposals from the dataset, training was mentioned in 93% of proposals among the proposed interventions, followed by interventions involving policy reform, advocacy, and awareness-raising (66%), asset-building measures (26%), and support for networks and cooperatives (24%). Most applications came from Africa (35%), and particularly Eastern Africa, which constituted 55% of proposals from the Africa region. Among African proposals, business training was the most frequently requested intervention in 2009 (37% of proposals), and awareness-raising was the most frequently requested intervention in 2011 (52% of proposals). The least demand for FGE funding came from Europe and Central Asia, which comprised 4% of submissions for the 2009 and 2011 cycles.

FGE is a multi-donor initiative dedicated to the advancement of women's economic and/or political empowerment through competitive grant-making and technical support of high-impact gender equality programs at local, national, and regional levels. Since its launch in 2009, the Fund for Gender Equality has delivered grants of US\$55 million to 93 programs in 69 countries. Government grantees in eight countries have contributed an additional US\$4 million toward their programs. Applicants include civil society organ-

izations and government agencies working directly on gender equality issues in their respective countries.

METHODOLOGY

In order to investigate specific elements within each proposal, a coding framework was established to record areas of interest. The framework included categories to collect data on grantee information, the project budget, grant duration, the three primary interventions the project proposed,²⁵ characteristics of the two primary beneficiary groups the proposal targeted,²⁶ the proposal's theory of change, and the project scope. All of these elements were coded with numerical values to reflect the most common components of the dataset.

The analysis revealed that, across the entire dataset, several interventions and beneficiary types were far more common than others. The dominance of these intervention and beneficiary types obscured more subtle trends within the data, such as variations among which kinds of beneficiaries were targeted in proposals from region to region. To more fully investigate these differences, a separate analysis was conducted, where the most common intervention and beneficiary types were excluded, and the remaining intervention and beneficiary types were examined for trends. For this purpose, codes for training, policy development & advocacy, and awareness-raising & outreach were excluded from the analysis.

GLOBAL DEMAND FOR TYPES OF INTERVENTIONS

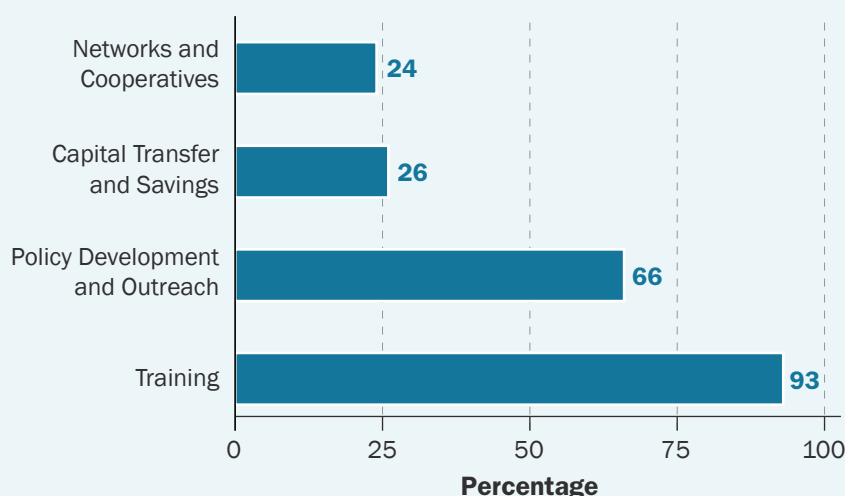
Of the 1,244 proposals from the dataset, training was the most common primary intervention proposed (in 1,159 or 93% of proposals), followed by policy reform, advocacy, and awareness-raising (818 or 66%), asset-building measures, including capital transfers (cash, credit, or in-kind) or savings (326 or 26%), and support for networks/cooperatives (303 or 24%). These figures reflect primary, secondary, and tertiary interventions included in each proposal in order to measure how frequently interventions from each grouping appear in the dataset.²⁷

25 Most proposals included a number of different economic empowerment interventions and the coding framework included the top three. This analysis reports on the primary, secondary and tertiary interventions proposed (some proposals included less than three interventions, in which case the framework reported on the interventions included).

26 Again, many proposals targeted more than two beneficiary groups; the coding framework includes information on the primary and secondary groups targeted.

27 As figures in the chart reflect up to three interventions per proposal, the percentages exceed 100%.

Global Demand for Types of Intervention 2009 and 2011



TRAINING ACTIVITIES

Training interventions include a wide range of approaches, including business management coaching, vocational training, education for careers not traditionally pursued by women, wage employment training, life skills instruction, and training in gender mainstreaming.

The most frequently proposed type of training was in vocational and livelihood skills in occupations traditionally held by women, including handicrafts, sewing, cooking, agriculture, and domestic service. 206 proposals (17%) listed vocational training as the primary intervention and a total of 461 (37%) requested it among either the primary, secondary, or tertiary interventions put forth in the proposal.

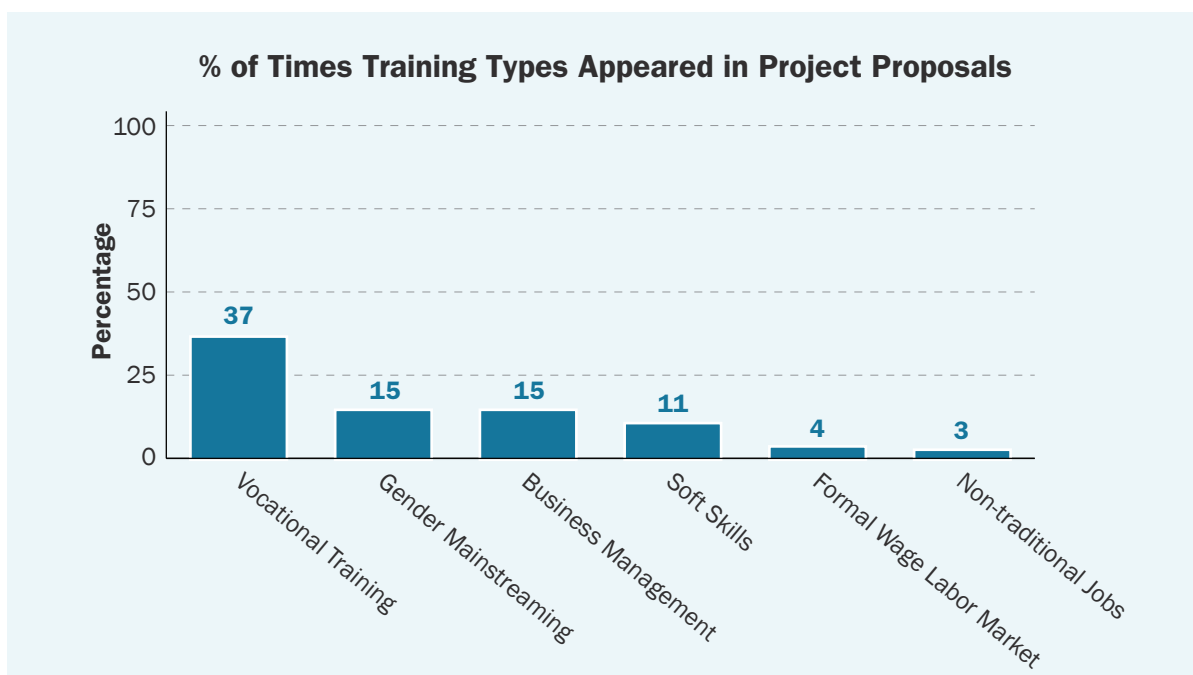
Gender mainstreaming was also among the most frequently proposed interventions, and refers to any training used to assist high and mid-level actors, such as policy-makers and community leaders, in incorporating gender sensitivity into organizational protocol, policies, and the processes of an institution. Gender mainstreaming appeared as a primary intervention approach in 86 (7%) proposals and was among intervention approaches in 182 (15%) proposals.

Business management training is used to help women either start or improve existing businesses. These trainings could include technical assistance, basic

business education, financial literacy training, or information about markets. Business training appears as a primary intervention in 135 (11%) of the proposals, and is mentioned among the three primary strategies in 181 (15%) of the proposals.

‘Soft skills’ training interventions are aimed at improving skills necessary to succeed in the workforce, including women’s degree of self-confidence, time management, and hygiene. Soft skills trainings were used as a primary approach in 78 (6%) proposals and are mentioned as an approach in 143 (11%) proposals’ primary, secondary, or tertiary interventions.

Finally, a small minority of proposals included training in non-traditional female roles (e.g. mining, information technologies, construction work, etc.). Many projects that fell under this code specifically mentioned the desire to train women in vocational skills that had been traditionally reserved for men, and some specifically cited this as an underlying economic empowerment strategy for women. 20 (2%) proposals selected this approach as a primary intervention, and 35 (3%) include it among their three primary approaches. Likewise, training for formal wage labor, which includes training for employment in factories and larger businesses, is rarely mentioned—19 (2%) proposals select it as a primary intervention and 46 (4%) projects mention it at all.



POLITICAL ADVOCACY, OUTREACH AND AWARENESS-RAISING

As mentioned, policy development, outreach, and awareness-raising were the second most commonly requested group of interventions. Policy development and advocacy were included together as one code, and included interventions that involved advocating to high-level bodies or lawmakers for policy change or development. A total of 136 (11%) proposals included political advocacy and policy development at national and local levels as primary interventions. This intervention is mentioned as an approach in 395 (32%) proposals. Outreach and awareness-raising were also grouped as a code, and denoted activities that involved disseminating a message to communities, targeted groups of women, or other stakeholders about a topic such as behavior change or the existence of a law. 108 (9%) proposals include outreach and awareness-raising campaigns as a primary intervention, and proposals mention including these activities 423 times (34%) altogether.

CAPITAL TRANSFERS AND FINANCIAL SERVICES

Capital transfers refer to programs that allocate credit, cash, or in-kind assets (small or large) to beneficiaries. Credit or micro-credit appeared in only 36 (3%) proposals as a primary intervention, and in 142 (14%) proposals total. Cash transfers are requested in only 10 (1%) cases as primary interventions, and 44 times (4%) among all the intervention approaches. Finally, only 6

proposals (less than 1%) requested small or undefined transfer of assets (in the form of seeds, fertilizers, or small animals) as the main intervention, whereas 30 proposals (2%) incorporated small transfers as a part of their project. A small minority requested large in-kind assets (e.g. cow, refrigerator, car, tractors or other assets relatively expensive in the local context). Specifically, 4 proposals (less than 1%) mentioned this as a primary intervention, and 15 proposals (1%) included it among the intervention approaches.

Interventions coded as offering financial services (savings) to beneficiaries include programs designed to assist women in opening a bank account, creating savings groups, or sending text reminders to participants to save. Savings is mentioned 20 times (2%) as primary interventions and 65 times (5%) as a primary, secondary or tertiary intervention.

NETWORKS AND COOPERATIVES

A fourth major group of interventions is represented by coalition-building and professional network strengthening through female cooperatives, trade unions, and networks. 303 proposals (24%) include these interventions in the project. In particular, the creation of networks is considered primary intervention in 44 proposals (4%), and is mentioned in a total of 174 proposals (14%). Creation or strengthening of professional cooperatives and trade unions is included in 46 proposals (4%) as a primary intervention and in a total of 129 proposals (10%).

LESS COMMONLY-REQUESTED INTERVENTIONS

Several interventions were rarely requested by proposals, including infrastructure, land titling/land certification, mobile phones, and childcare provision; these programs were requested in less than 1%-4% of proposals.

WOMEN'S POLITICAL PARTICIPATION

Interventions that focused on women's political participation included gender mainstreaming (for instance, through the inclusion of women in the political arena) along with other economic empowerment interventions. This category was included separately from Gender Mainstreaming Training as it did not involve knowledge transfer. For 2009 and 2011, this intervention was included as a primary intervention in 47 proposals (4%), and 128 times (10%) total.²⁸

OTHER

Interventions were coded as 'other' when they did not match any of the code categories. 99 proposals (8%) included a primary intervention coded as 'other,' and

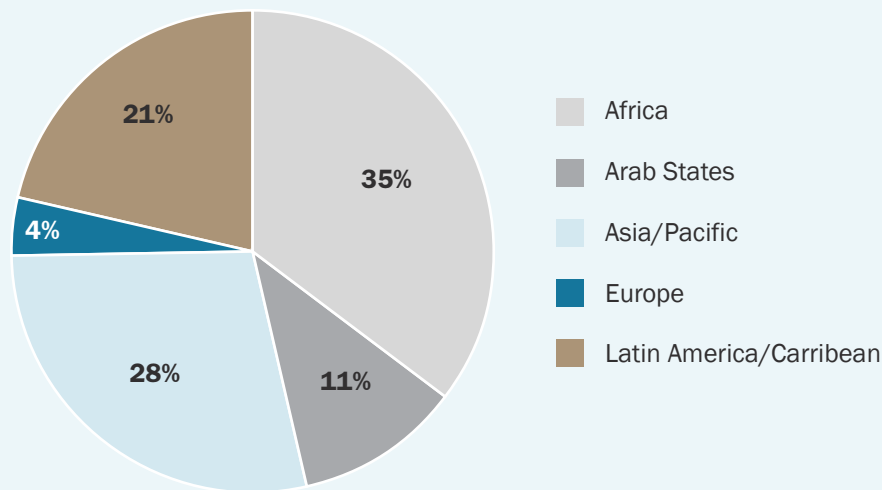
323 proposals (26%) contained an 'other' intervention. A large proportion of projects coded as 'other' referred to activities to monitor and evaluate programs, research projects, rule of law/legal services/law enforcement interventions, and rehabilitation/counseling/or other psychological support services for survivors of trauma and violence.

INTERVENTION DEMAND BY REGION AND SUB-REGION

The chart below depicts the demand for economic FGE projects by region from proposals submitted during the 2009 and 2011 grant cycles. The highest demand for FGE funding came from Africa, while the fewest proposals were submitted from Europe and Central Asia (ECA).

The original paper contains details about the types of projects proposed in each region, proposal requests by sub-region, and the breakdown of proposals targeting rural and urban locales. For more information, see the original paper on the Roadmap project website.

Proposal Submissions by Region 2009 and 2011



²⁸ Political Empowerment is one of the two categories of funding for FGE. In the first grantmaking cycle (2009-2010) applicant organizations could categorize their program as an "economic and political empowerment program", while in the second cycle (2011-2012) they had to select one category or the other. Nevertheless, a number of economic empowerment programs still included political empowerment as part of their package of interventions.

CONCLUSION

This project offers an analysis of 1,244 women's economic empowerment proposals submitted to UN Women's Fund for Gender Equality during 2009 and 2011, highlighting common project types, regional trends, and other proposal components of interest. The analysis intended to demonstrate and describe the types of interventions proposed, in addition to shedding light on the regional concentration of proposals submitted for a better understanding of the coverage and reach of the demand received by FGE.

Of the 1,244 proposals from the dataset, training was proposed most frequently, appearing in 93% of proposals, followed by interventions including policy reform, advocacy, and awareness-raising (66%), asset-building measures (26%), and networks and cooperatives (24% of proposals) for the 2009 and 2011 grant-making cycles.

The strong demand for training demonstrated through this analysis points to several alternative conclusions, all equally important to consider: first, that program implementers believe training really works to empower women economically given what they have seen in the field; or second, that training is considered a key intervention for the economic empowerment of women together with other interventions such as political advocacy, outreach, and awareness. A third possibility is that implementers believe training will be funded because donors are receptive to it, or that they are more experienced in administering training than other types of programs. It is not possible to know without further research with program implementation staff, and it is most likely a combination of these factors. However, given the extremely high number of proposals requesting training, it is above all important to ensure that training is done right. Recent research efforts to understand the impact of training have not examined closely the way in which training is delivered, or used in complement with other interventions. Since training is clearly the intervention of choice, at least among those submitting proposals to the FGE, it is critical to understand how it can be designed for maximum impact.

A woman wearing a wide-brimmed hat and a dark shirt is working in a field of low-lying plants. The entire image is covered with a semi-transparent blue overlay. The word "ANNEX" is written in white, bold, sans-serif capital letters in the lower right area.

ANNEX

ANNEX A: THE CONTEXT

Interventions that seek to empower women economically do not take place in a vacuum. Their effective implementation depends on the context in which they occur. Two development trends—demographic changes and job prospects—are particularly relevant in framing the context that surrounds and shapes women’s economic participation. Demographic trends profoundly influence women’s lives and their work choices. These choices are, in turn, molded by key features of the economy that influence labor markets and job prospects. Smart implementers will take this context into account when deciding which interventions to implement when and where.

DEMOGRAPHIC CHANGES

Demography is not destiny, but it matters. Trends and levels in fertility and mortality rates affect the resources that countries have for governing (both in terms of total fiscal resources and priorities), the share of the working-age population, the work options of men, and the life and work options of women, and especially of women in poor countries and poor households.

As countries develop, they transition from a situation of high fertility (levels above four children per woman) and declining child mortality (resulting in a large youth population), to a situation in which declining fertility (levels of four to 2.1 children per woman) over time leads to a high proportion of working-age adults relative to children and the elderly. The rising share of working-age people relative to children and the elderly creates a demographic window of opportunity for strengthened economic growth (Box 13). Finally, countries transition into a stage where the population is aging rapidly as a result of continuing low fertility (reaching replacement level fertility of 2.1 or lower) and declining adult mortality (May, 2012). An exception to these predictable patterns of changes in the age structure of populations is countries where the prime working-age population has been affected by premature adult mortality from armed conflict (Buvinić et al., 2009).

JOB PROSPECTS

Partly influenced by these demographic trends, as well as by natural endowments, countries also differ in their employment prospects and the development payoff of different jobs. Countries change as they develop from agrarian economies, where most people still work the land, to urbanizing countries where work in cities expands, to formalizing economies where economic growth increases the government’s fiscal space and ability to extend insurance coverage to a majority of the working population, to aging societies resulting from declining fertility and increased life expectancy.

Natural endowments, partly by concentrating economic activity in a few sectors and geographic locations, create unique job challenges in resource-rich countries and small island nations (WDR, 2013).

COUNTRY SCENARIOS

Demographic changes and job prospects can work in tandem to create four basic country scenarios with potentially different economic options for women: (1) high fertility agrarian economies; (2) declining fertility urbanizing economies; (3) declining fertility formalizing economies; and (4) aging populations, aging societies. The unique job challenges in missing adults/conflict-affected economies, and resource-rich countries and island states add variations to these basic scenarios.⁹⁰ These scenarios matter at both the macro level, because of the age and sex population structures they are associated with, and the micro level, because women with high or low fertility or present or absent partners face very different constraints and opportunities.

Figure 1 (in the main text) identifies countries according to the main stages of the fertility transition: high fertility, declining fertility and aging populations. Annex B lists countries according to these fertility stages. The features in each of these scenarios that affect the economic opportunities available to women are described below.

SCENARIO 1: HIGH FERTILITY, AGRARIAN ECONOMIES

Forty countries, mostly in Sub-Saharan Africa, have high fertility rates and, as a result, large youth populations. Births to mothers aged 15 to 24 are 30 to 50 percent of all births in more than half of these countries, and this rate has declined only marginally in the last 15 years (World Bank, 2009). The high adolescent fertility rate is a concern for health, education and employment reasons.

⁹⁰ These country scenarios describe typical country situations; individual countries or regions within countries may deviate significantly from the typical country scenario presented here.

BOX A1: THE DEMOGRAPHIC WINDOW OF OPPORTUNITY

As fertility declines and demographic conditions improve, countries enter the demographic transition stage characterized by a rising share of working-age people and greater opportunities for economic growth. This process is usually accompanied by a shift from a rural to an urban lifestyle.

A majority of developing countries are currently in the early or middle phases of the fertility decline, with levels hovering between 2.1 (or replacement level) and four children per woman, and large working-age populations relative to children and the elderly. Some countries are at the early stages of the fertility decline, still with large proportions of youth and cities undergoing fast growth. In these countries, jobs remain mostly in the informal sector. Other countries are further along in the transition, with somewhat older populations, established cities and economies in the process of formalization.

The large share of workers in the population compared to children and the elderly provides a window of opportunity for high growth and poverty reduction, called the “demographic dividend,” or growth in a country’s economy resulting from a change in the age structure of its population (Tsui, 2011).

Typically, the demographic dividend lasts for 30 to 50 years after which the population ages. It has two parts. First, per capita incomes rise from declining fertility and the increased labor supply. The second dividend results from a significant number of workers being able and motivated to save and invest for their financial security in old age (Tsui, 2011).

But if the demographic window is to produce a dividend, that is, result in accelerated growth, this working-age population has to be productively employed. The dividend is not an automatic result of shifting age structures in the population; it requires a favorable policy environment and government investments in the basic fundamentals of growth, including investments in women so they can be productively employed. Gender inequality in schooling and employment, by perpetuating women’s lower labor productivity relative to men’s, can limit the potential for economic growth resulting from the demographic window (Bloom & Canning, 2011).

Pregnant women of all ages, and especially teenagers, face much higher maternal mortality risks than do their counterparts in other countries. Not surprisingly, contraceptive use is much lower in these countries than in countries that have begun the transition to lower fertility.

The large number of young people under age 20 presents a major challenge as countries struggle to provide education and employment opportunities. The gap between boys’ and girls’ enrollment rates has decreased as girls’ primary school enrollment rates have risen substantially in recent decades. Despite this positive trend, overall secondary school enrollments remain very low especially in Sub-Saharan Africa (24 percent for girls and 33 percent for boys), which creates a prospective youth labor force with low skills.

The majority of the population in these countries lives in rural areas, with inadequate infrastructure and services, and works in agriculture or off-farm activities linked to agriculture. Formal wage employment accounts for less than ten percent of total employment

and a very small proportion of these workers are female. In Sub-Saharan Africa, for instance, a quarter or less of formal sector workers are women (WDR, 2013).

Women are over-represented in agriculture, mostly in subsistence agriculture, and their presence in farming has only grown over time as men have left agricultural work for better jobs in the cities. The female share of agricultural workers has grown in Sub-Saharan Africa, from 46 percent in 1980 to 49 percent in 2010 (FAO, 2011). Women also comprise a growing number of self-employed, subsistence-level rural entrepreneurs.

As illustrated by the story of the Nigerian farmer Ade, low-productivity work in agriculture, low earnings in off-farm income generation activities, severe time constraints due to productive responsibilities on the farm or in the firm, and large families at home characterize the situation of women in high fertility, agrarian economies.

Interventions that seek to increase women’s productivity in farming and earnings in off-farm enterprises, therefore, must be designed with an awareness of

BOX A2: FAMILY PLANNING LEADS TO HIGHER WOMEN'S EARNINGS IN BANGLADESH

A social experiment in Bangladesh showed increases in women's earnings 19 years after these women began having access to quality reproductive health and family planning services. Their earnings were 40 percent higher than those of women in control villages without these services; similarly, their reported physical assets were 25 percent higher. Women's health in the experimental villages had also improved (as measured by body mass indexes) as had the health and schooling of their children when compared to controls. An interesting feature of this program is that it accommodated social restrictions that discouraged women from leaving the home by having literate female workers providing services and counseling at women's home sites (Canning & Schultz, 2012).

increase access to quality family planning and basic reproductive health information and services so that women, and especially young women who are most adversely affected by early fertility, are healthier and have time available to devote to productive work. Some evidence further suggests that access to family planning and reproductive health services in themselves may spur women's increased earnings (Box 14).

Increased gender equality in high fertility agrarian economies resulting from effective income-enhancing interventions for women, in turn, can speed fertility decline and trigger the demographic and economic benefits associated with the fertility transition.

SCENARIO 2: DECLINING FERTILITY, URBANIZING ECONOMIES

In countries that are urbanizing and experiencing early fertility decline, the expansion of the formal sector to levels that can absorb a large share of women (and men) is still far in the future, and income-enhancing opportunities for women take place largely in the informal economy. Most interventions seeking to improve women's productivity and earnings, therefore, need to be mindful that complementary service provision, including productive technologies and financial services, will largely be provided through informal sector institutions that can be less reliable and more costly than formal sector ones and may or may not be available or accessible to women. Also, these income-enhancing interventions may not be effective if they do not address the potential shortage in infrastructure and other services, including electricity, transport, and child care, all of which assist women in shifting their time allocation from home-based to market-based work.

The integration of rapidly urbanizing countries into the global economy can lead to the expansion of wage employment for women, especially in low-skilled jobs in light manufacturing. Jobs in light manufacturing

can open employment options for women, particularly young women, in countries where employment choices for them had in the past been restricted or unavailable. This expansion of opportunities can lead to a virtuous cycle where enhanced labor earnings for women stimulate increased schooling for girls and higher opportunity costs of raising children, which, in turn, may raise the age of marriage and further reduce birth rates (WDR, 2013).

While fertility rates are lower in these countries, poor maternal health remains a concern, especially in countries in early stages of the fertility decline. In these countries, use of maternal health services (particularly skilled attendance at birth and antenatal care) remains low. Moreover, births to young women still make up a large share of all births. Thus, a focus on reproductive health information and services for all, but especially for young women and adolescents, remains a priority. Facilitating young women's entry into wage-earning and self-employment, therefore, needs to go hand-in-hand with investments by public or private providers in adolescent reproductive health programs to address early childbearing.

SCENARIO 3: DECLINING FERTILITY, FORMALIZING ECONOMIES

These economies are characterized by large urban populations where many residents have incomes well above poverty levels, yet where many still work in informal employment (WDR, 2013). There is a divide between a modern, urban formal sector and the prevalence of informal employment. Informal sector workers lack legal job protections and social security benefits, and while a larger number are men, women who work have a higher probability of working in the informal sector (WDR, 2013). The informal sector is large in countries where labor productivity is low, government services are weak, and the business environment is

less flexible. Informality can trap women in low-productivity, low-paid work as poorly paid or unpaid employees or subsistence-level entrepreneurs.

To break this trap, interventions need to make it easier for women to accumulate productive assets, including education, capital and land, so that they can shift from subsistence to high-value production. Financial services that are accessible to women and that provide savings and insurance vehicles as well as credit can be particularly important to reap the benefits of the second stage of the demographic window, where workers save and invest for retirement. All this requires a favorable business environment that is not unduly biased against women and where corruption, which can be particularly detrimental to women's business performance, is held in check (IFC, 2011).

Overall, governments that fully reap the benefits of the demographic window of opportunity create a favorable investment climate that protects property rights, promotes international trade and relaxes labor market rigidities to increase labor demand; they also invest early in the schooling and health of potential entrants to the workforce, including females. The growth potential of income-enhancing interventions for women in countries experiencing declining fertility should multiply when they take place in environments conducive to the advancement of businesses and of women.

SCENARIO 4: AGING SOCIETIES

The rapid fertility decline is graying populations in developing countries faster than it has in developed countries, and at lower levels of income. While the share of older people at the start of this century was higher in industrial nations, Eastern Europe and the Southern Cone of Latin America, by mid-century 80 percent of the world's elderly will be living in developing nations (WDR, 2013).

Women comprise by far the greater number and proportion of older populations in industrial countries today, and, with some exceptions (in countries or regions within countries where a deficit of female births relative to male ones will tilt the balance of the surviving elderly to men), will similarly form the majority of the future elderly in developing countries. Population estimates from 2008 indicate an average global life expectancy of 71 years for females and 67 years for males; in low-income countries these figures were 69 and 65 years, respectively (WDR, 2012).

These demographic trends mean that an increasing proportion of older women are single, widowed or divorced. These women are especially vulnerable, since if they have worked, they have mostly done so in the informal sector where they have had few or none of the job entitlements of formal sector workers. In countries where pension schemes accrue mainly to employees, women who have not worked in wage employment for most of their adult lives become even more heavily reliant on their husbands' income and pensions.

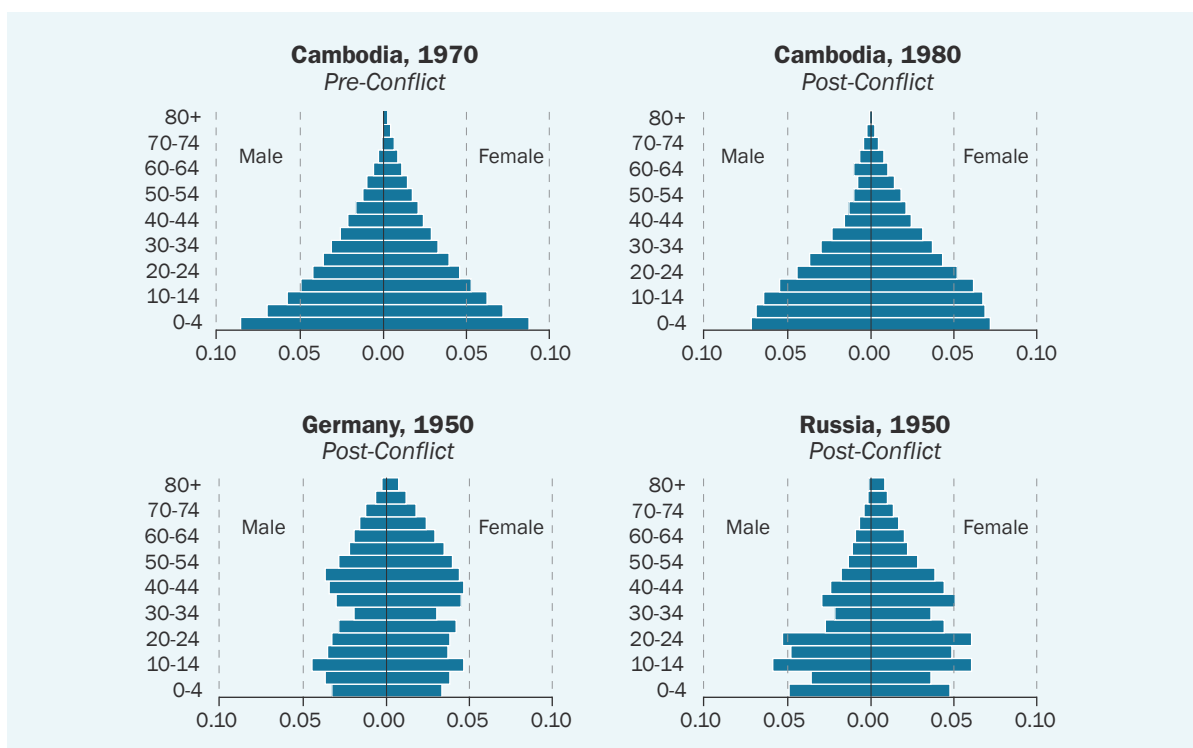
Aging affects the labor market through many different channels, including shrinking the pool of working-age young adults, increasing disability rates for older workers, reducing savings rates and increasing expenditures in care of the elderly (WDR, 2013). The working-age population in these societies faces pressures to generate income to meet the needs of the elderly generation. Familial support in the developing world is still largely the norm, with children the main source of material and physical support for elderly parents (Smeeding et al., 2008). Mostly female children take up the care of the elderly. These increasing time demands at home may reduce their ability to participate in the labor market.

MISSING ADULTS / CONFLICT-AFFECTED ECONOMIES

Most conflict-affected countries are high fertility or early declining fertility countries with young populations and significant numbers of men in their prime working age missing as result of deaths and war injuries. A direct consequence of violent conflict is a disproportionate level of male deaths.⁹¹ The higher mortality level among men depletes the economy of working-age adults and creates a high share of females and of widows in the population. The resulting shortage of working-age men can be dramatic: in 1950, after World War II, there were 40 percent more women than men aged 25 to 39 in Germany and 57 percent more in what is now the Russian Federation (Figure A1).

91 For instance, males accounted for more than 80 percent of the fatalities during the civil conflicts in Guatemala, Kosovo, East Timor, and Rwanda and about 65 percent of the approximately two million deaths in Cambodia (Buvinić et al. forthcoming).

FIGURE A1: ESTIMATED POPULATION DISTRIBUTION BY AGE AND SEX



Source: Buvinić, M., Gupta, M.D., Casabonne, U. & Verwimp, P. (2013) Violent Conflict and Gender Equality: An Overview *World Bank Researcher Observer* (28)1, p. 116.

This missing population creates labor shortages, a rise in household dependency ratios and a loss of household income from the missing adult. It also increases the work women do outside the home, partly because many need to assume primary responsibility for ensuring the survival of families when working-age males have died or are missing. It can also open spaces that were formerly unavailable to women in the family, the economic and political life. Emerging literature shows evidence of these benefits: traditional gender roles have changed and are more equal in households headed by war widows in Rwanda; forcefully displaced women in rural Colombia are much more active economically than similar women in rural areas that were not touched by the conflict; and women have taken up leadership roles in the post-conflict governments in Liberia, Rwanda and Sierra Leone (Schindler, 2010; Calderon et al., 2011; WDR, 2011).

Economic opportunities for women arise, however, in a particular post-conflict context, where the productive infrastructure has been damaged, resources have been depleted and institutions have been overturned. Thus, to take advantage of these potential opportunities, entrepreneurship, self-employment and other income-enhancing programs for women need to ac-

count for the need to rebuild markets, infrastructure and the private sector. Programs that address these issues head-on will be more likely to succeed, such as value chains that connect farmers and entrepreneurs to restored or new markets, investments in rural infrastructure that are paired with income-earning opportunities for women and women's business associations that are instrumental in rebuilding the private sector.

Because war often disrupts schooling, income-enhancing programs may need to be offered with accelerated learning programs to provide literacy and reduce the skills deficit of young women (and young men). The implementation challenge is to roll out and take to scale income-enhancing and learning programs for young and adult women in post-conflict settings with inadequate infrastructure and little to no institutional capacity.

Sexual and gender-based violence are distressingly common features associated with conflict, and affect women disproportionately (WDR, 2011). Post-conflict programs mostly address the physical and psychological needs of victims although they may include some features of prevention. Income-enhancing interventions may help with the rehabilitation of victims and

add an important component of prevention of crime and violence in post-conflict peacetime by promoting economic independence and empowerment.

SPECIAL JOB CHALLENGES: RESOURCE-RICH COUNTRIES AND SMALL ISLAND NATIONS

Resource-rich countries and small island nations span countries in very different stages of the demographic transition—from high fertility agrarian economies (e.g., Chad and Papua New Guinea) to declining fertility and aging societies (e.g., Norway and Barbados). With some exceptions, such as Norway, they share the challenge of little job creation aside from jobs linked to the natural resources sector and restricted employment opportunities for women and other excluded groups in the population.

In the case of resource-rich countries resources and jobs are concentrated in the booming enclaves related to extractive industries and tend to flow poorly to the rest of the country (WDR, 2013). A predominantly male labor force works directly in extractive industries, and women may have a hard time getting jobs in an often well-paid but rationed public sector. In societies with marked traditional gender roles, the influx of wealth to male workers can have detrimental effects on women's autonomy and status (WDR, 2013).

In small island nations, geographic isolation, small domestic markets, and higher costs of exporting and doing business restrict employment opportunities for all and encourage international migration (WDR, 2013). Of the viable jobs in small island states linked to natural resources, tourism, and to a lesser extent fisheries, are a source of employment for females, but usually in lower-paid positions than males.

Income-enhancing interventions for women in both these contexts have the potential to help spread the benefits from the exploitation of natural resources more equally. However, they face the challenges of creating and protecting economically productive spaces for women associated with the natural resources sector or linking women to sufficient resources (e.g., capital, land, technologies) so they can profitably operate outside natural resources, in domestic or niche export markets. Special efforts may be needed to simultaneously identify, develop and link women producers to these markets. A growing number of initiatives seek to expand jobs for women in these challenging economies through training and access to domestic and niche export markets. The payoff of these initiatives should increase when combined with additional requirements defined by the country's particular demographic scenario.

These different country scenarios defined by demographic changes and job prospects define the nature of opportunities for women and impose outside limits on their work and life choices. The different types of interventions that are reviewed in this Roadmap for Action are embedded in a particular country scenario. Their success ultimately depends on how well these interventions respond and adapt to the constraints and opportunities implicit in each scenario, including the complementary programs and policies identified.

ANNEX B & C: FOLLOWING PAGES

ANNEX B: FERTILITY TABLE

HIGH FERTILITY (X >4.0)		DECLINING FERTILITY GROUP 1 (3.1< X <4.0)		DECLINING FERTILITY GROUP 2 (2.1< X <3.1)		AGING SOCIETY (X ≤ 2.1)	
Niger	6.93	Ghana	3.99	Namibia	3.06	Iceland	2.10
Zambia	6.30	Togo	3.86	Lesotho	3.05	Ireland	2.10
Somalia	6.28	Ethiopia	3.85	Philippines	3.05	New Caledonia	2.09
Mali	6.12	Guatemala	3.84	Honduras	3.00	United States of America	2.08
Malawi	5.97	Papua New Guinea	3.80	Israel	2.91	Guadeloupe	2.06
Afghanistan	5.97	Tonga	3.78	Jordan	2.89	Indonesia	2.06
Timor-Leste	5.92	Samoa	3.76	Paraguay	2.86	Uruguay	2.04
Uganda	5.90	Vanuatu	3.75	Syrian Arab Republic	2.77	French Polynesia	2.03
Burkina Faso	5.75	Djibouti	3.59	Belize	2.68	Turkey	2.02
Chad	5.74	Sao Tome and Principe	3.49	Saudi Arabia	2.64	Saint Vincent and the Grenadines	2.00
United Republic of Tanzania	5.50	Micronesia (Fed. States of)	3.31	Egypt	2.64	Dem. People's Republic of Korea	1.99
Democratic Republic of the Congo	5.49	Bolivia (Plurinational State of)	3.23	Kyrgyzstan	2.62	France	1.99
Nigeria	5.43	Pakistan	3.20	Botswana	2.62	Brunei Darussalam	1.98
Rwanda	5.28	Gabon	3.20	Fiji	2.60	Australia	1.95
Angola	5.14	Swaziland	3.17	Nepal	2.59	Norway	1.95
Benin	5.08	Tajikistan	3.16	Malaysia	2.57	United States Virgin Islands	1.94
Liberia	5.04	Haiti	3.16	Lao People's Democratic Republic	2.54	Myanmar	1.94
Guinea	5.03	French Guiana	3.14	India	2.54	Sweden	1.93
Equatorial Guinea	4.98	Zimbabwe	3.11	Nicaragua	2.50	Tunisia	1.91
Yemen	4.94			Dominican Republic	2.49	Saint Lucia	1.91
Guinea-Bissau	4.88			Kazakhstan	2.48	Netherlands Antilles	1.90
Comoros	4.74			Western Sahara	2.45	Denmark	1.89
Sierra Leone	4.73			Mongolia	2.45	Bahamas	1.88
Mozambique	4.71			Bahrain	2.43	Finland	1.88
Gambia	4.69			Cambodia	2.42	United Kingdom	1.87
Kenya	4.62			Guam	2.42	Belgium	1.84
Senegal	4.61			Libyan Arab Jamahiriya	2.41	Chile	1.83
Iraq	4.54			Peru	2.41	Martinique	1.82
Madagascar	4.49			Panama	2.41	Costa Rica	1.81
Congo	4.44			Ecuador	2.39	Brazil	1.80
Central African Republic	4.42			Venezuela (Bolivarian Republic of)	2.39	Netherlands	1.79
Mauritania	4.36			South Africa	2.38	Lebanon	1.76
Cameroon	4.29			Turkmenistan	2.32	Puerto Rico	1.76
Occupied Palestinian Territory	4.27			Colombia	2.29	Viet Nam	1.75
Eritrea	4.24			Cape Verde	2.28	Armenia	1.74
Sudan	4.23			Suriname	2.27	United Arab Emirates	1.71
Côte d'Ivoire	4.22			Uzbekistan	2.26	Estonia	1.70
Mayotte	4.18			Jamaica	2.26	Canada	1.69
Burundi	4.05			Bhutan	2.26	Luxembourg	1.68
Solomon Islands	4.04			Kuwait	2.25	Aruba	1.67

High Fertility (X >4.0)	Declining Fertility Group 1 (3.1< X< 4.0)		Declining Fertility Group 2 (2.1< X <3.1)		Aging Society (X ≤ 2.1)	
			Réunion	2.25	Maldives	1.67
			Sri Lanka	2.24	Trinidad and Tobago	1.63
			Mexico	2.23	Montenegro	1.63
			Qatar	2.20	Mauritius	1.59
			Guyana	2.19	Iran (Islamic Republic of)	1.59
			Morocco	2.18	Barbados	1.58
			Argentina	2.17	Serbia	1.56
			Grenada	2.17	China	1.56
			El Salvador	2.17	Bulgaria	1.55
			Bangladesh	2.16	Greece	1.54
			Azerbaijan	2.15	Switzerland	1.54
			Oman	2.15	Russian Federation	1.53
			Algeria	2.14	Thailand	1.53
			New Zealand	2.14	Georgia	1.53
					Albania	1.53
					Channel Islands	1.51
					Latvia	1.51
					Spain	1.50
					Czech Republic	1.50
					Croatia	1.50
					Lithuania	1.50
					Ukraine	1.48
					Belarus	1.48
					Slovenia	1.48
					Italy	1.48
					Cyprus	1.46
					Germany	1.46
					Cuba	1.45
					Republic of Moldova	1.45
					Hungary	1.43
					Romania	1.43
					Japan	1.42
					Poland	1.42
					TFYR Macedonia	1.40
					Republic of Korea	1.39
					Slovakia	1.37
				Singapore	1.37	
				Austria	1.35	
				Portugal	1.31	
				Malta	1.28	
				China, Macao SAR	1.16	
				China, Hong Kong SAR	1.14	
				Bosnia and Herzegovina	1.13	
				Other non-specified areas	1.05	

ANNEX C: FEATURES OF AN ENABLING ENVIRONMENT

Listed below are some of the circumstances that are known to facilitate the effective implementation of different interventions.

INTERVENTION	CIRCUMSTANCES UNDER WHICH INTERVENTION IS LIKELY TO BE EFFECTIVE
Credit	<ul style="list-style-type: none"> • Opportunities exist for profitable microenterprises. • Microfinance institutions are able to operate without subsidies.
Conditional cash transfers	<ul style="list-style-type: none"> • Girls have physical and social access to quality schools. • Girls' secondary schooling attainment is low due to high drop-out rates. • Discount rates are relatively low (because benefits are delayed and accumulate over many years).
Unconditional cash transfers	<ul style="list-style-type: none"> • Young women have access to savings products. • Young women have access to skills and livelihood training.
Land rights/land titling	<ul style="list-style-type: none"> • There is substantial risk of land expropriation. • There is resettlement. • There are attractive opportunities for land-related investments. • Land and financial markets are relatively developed.
Rural electrification	<ul style="list-style-type: none"> • High percentages of households are not connected in communities with electricity. • Women participate in household decision-making. • Households are able to purchase at least some time-saving appliances. • Opportunities exist for work outside the home or microenterprise development.
Bundled services: Asset transfer plus training or technical assistance	<ul style="list-style-type: none"> • Capital transfer is large and combined with intensive (i.e., long-lasting), asset-specific training. • Different types of trainings are combined (e.g., on-the-job and life skills).
Mobile money	<ul style="list-style-type: none"> • Necessary communications and financial infrastructure exists. • Telecommunications markets are competitive. • Most users (or at least one household member) are literate. • Phone ownership/use by women is high. • Mobile money services are linked to formal bank accounts.
Mobile phones for information	<ul style="list-style-type: none"> • Markets are dispersed and infrastructure is poor.
Modern agricultural inputs	<ul style="list-style-type: none"> • Use of modern inputs by women is low. • Effective public or private extension services are available to women. • Women have savings or access to credit.
Suite of services for farming	<ul style="list-style-type: none"> • Women hold formal and informal leadership positions (e.g., in farmers' groups, in village-level governance structures, as extension officers). • Land tenure and inheritance laws include women. • Government agencies have capacity and are involved in projects, and governments have favorable views of female inclusion. • Projects engage households and communities, men and women.
Farmer field schools	<ul style="list-style-type: none"> • <i>No reliable information available</i>

INTERVENTION	CIRCUMSTANCES UNDER WHICH INTERVENTION IS LIKELY TO BE EFFECTIVE
Farmer associations	<ul style="list-style-type: none"> • Organization is conscious of internal group workings and gender dynamics. • Government agencies have capacity and are involved in projects, and governments have favorable views of female inclusion. • National laws mandate minimum female participation levels.
Business training	<ul style="list-style-type: none"> • Training is intended to help launch new businesses. • Training is offered by a microfinance organization or professional trainers. • Norms with respect to female entrepreneurs are favorable. • Training followed-up by individualized technical assistance.
Business networks	<ul style="list-style-type: none"> • Networks provide access to business contacts and opportunities, as well as learning and information exchange. • Range of size and sophistication of businesses in the network is not too wide. • Leadership is not dependent on one strong personality. • Size is sufficient to bring credibility, but not so large that potential business contacts are too distant or the network does not offer benefits tailored to participants' needs. • Alternative revenue-generating models exist, so they do not have to rely solely on membership fees and donor contributions. • They collaborate with other networks (including mixed male-female business networks), organizations and service providers.
Demand-driven skills training	<ul style="list-style-type: none"> • There is demand for labor and employers are willing to hire youth, and young women in particular. • Social restrictions for young women working for pay are few or none. • Women's equal access to programs is promoted, particularly for non-traditional skills training. • Stipends to cover child care are provided. • Programs are decentralized and able to capture the skills and work opportunities of local communities. • Parents and community leaders are engaged in program design, especially in socially conservative settings.
Wage subsidies or employment vouchers	<ul style="list-style-type: none"> • There is demand for labor and employers are willing to hire youth, and young women in particular. • Social restrictions for young women working for pay are few or none.
Mentors and role models	<ul style="list-style-type: none"> • Mentor and mentee come from the same or related sectors, but are not in direct competition with each other. • There is a solid match between mentor's skills and experience and mentee's business growth needs. • Mentor and mentee have clear expectations, goals and objectives, often provided by initial training and guidelines. • Mentors serve as sponsors and leverage their influence, contacts and visibility to assist the mentee in better positioning her business. • Skills-based training accompanies or complements mentoring.
Child care	<ul style="list-style-type: none"> • Formal wage markets are developed.

A woman in a white dress holding a bouquet of flowers, with a blue overlay and the word REFERENCES.

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